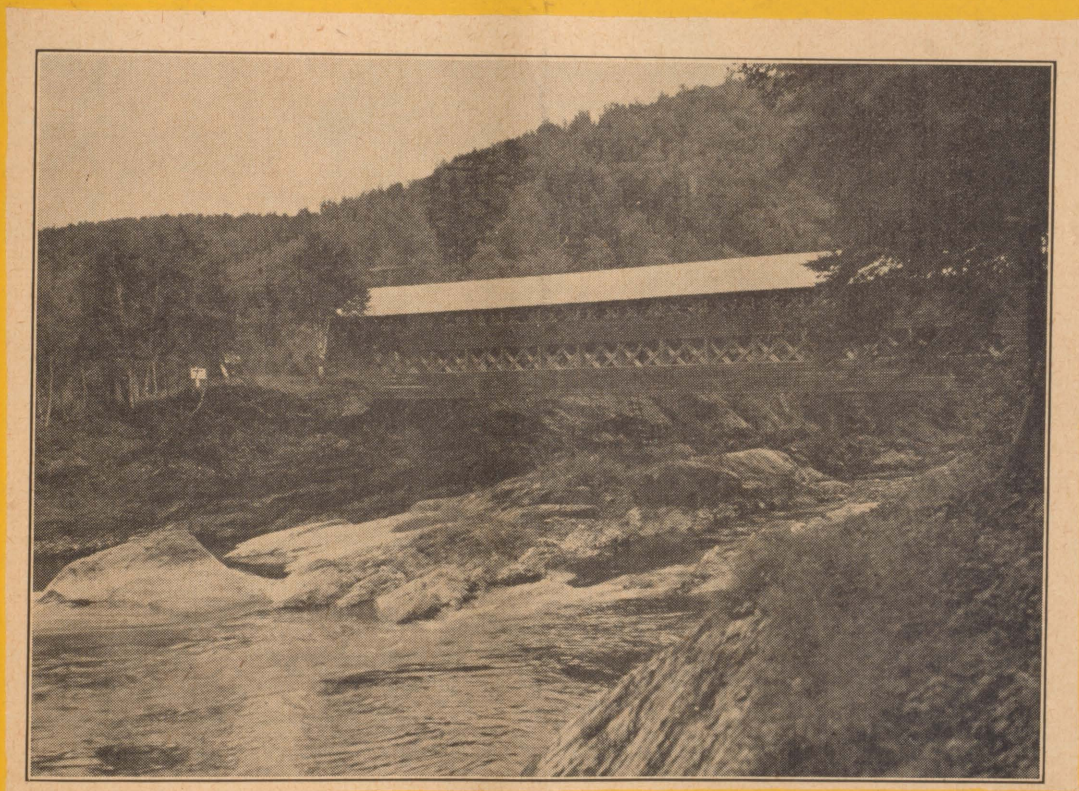


# MACDONALD COLLEGE JOURNAL



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No. 7



MARCH  
1951

Farm · Home · School





THE MACDONALD LASSIE





## Partners Working for World Progress

"Today the hungry people of Asia and Africa are knocking at our door," says Hon. Paul Martin, Minister of National Health and Welfare. "If we do not answer they may hammer it down."

"We must open our door to them," he continues, "not only to give them food, but also to share with these people the knowledge that will help them to help themselves. By giving them technical assistance and by teaching them modern methods of cultivation we can harvest good will. If we do not let down the bars of privilege and ignorance that prevent other people from emulating our progress we risk disaster."

Thus our Minister of National Health and Welfare places a real challenge before Canadian agriculture — the challenge to take its full share of responsibility in maintaining world peace. And it is not to the farmer alone that he speaks, but also to the many workers in government and industry who are as essential to modern agriculture as the farmer himself.

If one acre has been made to do the work of two, it has been through the efforts of men with microscopes and blueprints, with tweezers and test-tubes; of men who keep the marketing machinery in good repair; and of men who travel the back roads through fair weather and foul, to bring farmers a vision of what they can do through scientific methods. Without all of these men farmers could not have made a fraction of the progress we have.

Canadian farmers of 50 years ago were almost self-sufficient — but not those of today. Most of what we produce is sold to buy things which, in the last half century, have changed from figments of uncurbed imaginations — into every-day essentials. In addition, we spend 10 times as much as our grandfathers did for taxation, comforts and education. And yet this money must, in most cases, come from the same land.

How has this revolution been brought about? How has the land been coaxed to grow automobiles, radios,

vacuum cleaners and indoor plumbing? Certainly not through the single-handed efforts of any one group, but a partnership of many.

We had to have machines that could make good use of short spells of favourable weather. We had to have crops that would suit our wide variety of soils and climatic conditions. We had to have market outlets and provision for storage and processing of farm products so they wouldn't be unloaded all at once. And we had to organize our work so as to make good use of all these things.

Every step of progress has come through a partnership of research, extension and marketing, working along with the farmer. And we have undoubtedly made great strides. But there are still many difficulties ahead; and the further we go, the more of them appear. Whether we continue to progress will depend on the calibre of the people who take part in every phase of the job. They must be as capable as the men who have made progress possible in the past — and they must be even better trained.

In this issue of the Journal we have tried to give our readers some understanding of what else besides farming is involved in agriculture. The picture is far from complete; but we believe it will help to create a closer partnership within our industry. And we hope it will serve as a stimulus, both to farmers and those who have decided to serve agriculture in other essential capacities. We are all up against the same challenge — to produce not only food and fibre, but international good will.

### Our Cover Picture

Our Gaspé subscribers may recognize the location where our cover picture was taken — the covered bridge crossing the Assemetouquagan River near Causapsal. Photo by the C.N.R.

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# A Glance at Agricultural Research

by K. W. Neatby  
Director, Science Service,  
Canada Department of Agriculture

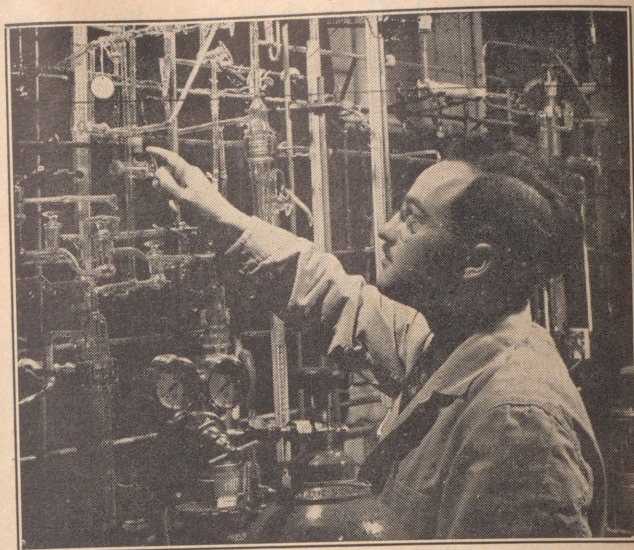
WHEN the Farm Editor invited me to prepare an article on agricultural research "to be aimed at the average farm reader", I willingly agreed to do so because I enjoy talking and writing to farmers about this subject and nowadays seldom find an opportunity to do either. Moreover, it is not a bad thing for those of us responsible for spending large amounts of public funds to be called upon to justify our outlays not only to governments, but also to those who are entitled to derive direct benefits from what we do. In an article so short, it will be necessary to write in very general terms and to omit many important and interesting aspects of the subject; but if it were any longer, probably no one would read it.

Before going any further, it may be a good plan to explain what we mean by agricultural research. I will define it as a method for discovering **principles** and processes upon which improved farm practices can be based. I emphasize **principles** because there are those who would use the word "facts" instead, and although facts are very important they are not enough.

For example, observation of the fact that vigorous growth of legume crops was associated with the presence of root nodules, and that the establishment of new stands might be aided by spreading soil from an old alfalfa field on the new, might be important and useful; but such methods alone would never lead to an understanding of nitrogen fixation by bacteria working in co-operation with the cells in roots of legumes. This understanding was followed by the discovery that, as a rule, bacteria associated with one type of legume would not do for another.

More recently, it has been shown that some strains of bacteria inhabiting nodules on alfalfa roots, for example, are more efficient nitrogen-fixers than are others. There can be no doubt that legume crops would be less widely and less well grown without this background of research.

While we are more or less underground another example occurs to me and it, also, serves to show how important and yet how inadequate field observation alone may be. A few years ago, it was observed that potatoes



A research worker in a Dominion Government laboratory.

**Just what is research? Why may a project that has little or no direct relation to agriculture result in great benefits to farmers? Just what elements enter into a good research program? These and many other questions are answered in this closely reasoned article by the scientist who directs Canada agricultural research.**

following a green manure soybean crop were comparatively free from common scab. This might suggest that abundant organic matter and nitrogen would control scab; but it was found that plowing under red clover, for example, wouldn't do the trick.

So far so good, but it immediately occurs to the research-minded investigator that if he could find out **why** potatoes are less scabby, following soybeans plowed under, perhaps some important principle might emerge that would extend beyond the control of common scab.

Scientists in the Federal Department of Agriculture, the Ontario Agricultural College, and the University of Western Ontario put their heads together and decided first to find out if a principle already known might explain what was going on. I refer to the principle, or phenomenon if you like, of **antibiosis**. This rather unattractive word relates to the inability of one kind of living organism to be fruitful and multiply in the presence of another.

However, this definition is too sweeping because it would embrace two countries at war — and certainly poison gases and atom bombs have antibiotic effects! So





The new Science Service building at Ottawa.

the use of the word is restricted to microorganisms such as fungi, bacteria, actinomycetes, etc.

But to return to soybeans and potato scab, researches completed to date indicate that plowing under soybeans encourages the multiplication of microorganisms that are antibiotic to *Streptomyces*, the organism that causes potato scab. There is no doubt whatever that this is a field of study of tremendous importance not only to the problem of controlling soil-borne plant diseases, but to many other soil conditions affecting the welfare of crop plants. It is a field of study that is only just beginning and many intriguing questions remain to be answered.

### Thank Research for Hybrid Corn

I would like to make use of one more example to illustrate how important it is to understand, so far as possible, the principles underlying our agricultural experimentation. The development of hybrid corn in North America was front page news and certainly had a better right to a place on the front page than a lot of the stuff that gets there. Hybrid corn, as we know it today, would not exist were it not for earlier purely academic research on reasons for observed effects of inbreeding and on the causes of observed hybrid vigour.

Because inbreeding animals and self-fertilizing normally cross-fertilized plants usually resulted in a wide variety of abnormalities and reduction in vigour and fertility it was supposed for a great many years that inbreeding was, in itself, a bad thing. Researches in this field make such an interesting story that it is tempting to occupy more space for them than can be spared.

We must content ourselves with two important conclusions that will bring us back to hybrid corn. The first is that the abnormalities that so commonly occur in inbred populations were already more or less widely distributed in the cross-bred parent populations, but were mostly masked by cross-breeding and, subsequently, exposed by inbreeding. The second fact is that inbred

lines, or families, are usually much more uniform than cross-bred ones.

Obviously, then, the essential features of modern corn breeding are first, to expose and eliminate abnormalities and weaknesses by inbreeding, secondly, to select the most vigorous selfed lines and then, thirdly, to restore, or improve upon, the original of open pollinated stocks from which selfed lines were obtained by means of appropriate single crosses followed by double crosses.

### Prompted by Curiosity

In case any of my readers may sometimes feel that agricultural research workers are apt to lose sight of the farm, I make so bold as to remind them that the foundation for hybrid corn was built mainly by men who assumed no responsibility for farm problems as such. They were prompted mainly by their own curiosity and, although curiosity is not enough, useful research, pure or applied, is rarely performed without it.

Before proceeding to deal with agricultural research in more general terms, I must apologize to the animal-minded readers for having dealt with plant problems, so far, to the exclusion of animal ones; but doubtless they can substitute or add suitable livestock examples if they wish to do so.

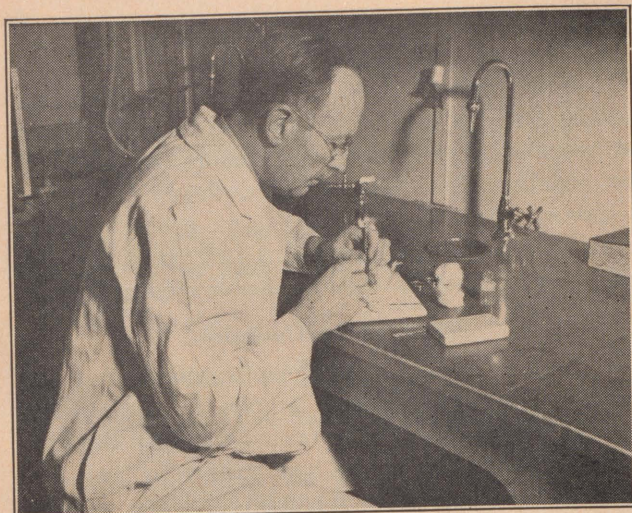
If we exclude research in the fields of economics, transportation, storage and processing, we shall find that all remaining agricultural research is directly or indirectly aimed at developing plants and animals better adapted to specific conditions or to improving the conditions under which plants and animals must reproduce and grow.

To take a simple case—dairy cattle, to be highly productive, must be bred and selected for high yields of milk and butterfat; but good breeding is useless unless the cows



Dr. K. W. Neatby, the author of this article, is Director of the Science Service, Dominion Department of Agriculture.





Charles E. Allen checks results of vitamin feeding.

are well housed, well fed, and protected from diseases, insect pests and any other influences disagreeable to a cow.

Very interesting stories could be written about research on nutrition, pasture management, tuberculosis, Bang's disease, mastitis, warble flies and so on, and we still have a lot to learn about these subjects. In other words, with the exceptions noted in the second paragraph back, all agricultural research is concerned with the heredity and environment of plants and animals.

#### Without Heart or Lungs?

The degree of success possible for plants and animals (including man, in my opinion) is determined by what they inherit from their parents and the kind of environment they may be privileged to enjoy. Consequently, arguments on the subject of the relative importance of heredity and environment are about as sensible as debates on the subject of whether one would rather do without heart or lungs.

Let us examine research first from the viewpoint of heredity. Breeding for specific purposes has proceeded much more rapidly with plants than with animals. I think there are two main reasons for this. One is that the time from one generation to another is generally shorter with crop plants than with farm animals. The second reason is that we can control the environment of animals; that is, nutrition, shelter, protection from diseases, pests, etc., more readily than we can that of plants.

Much of the work of Canadian plant breeders, particularly those at Macdonald College, will be familiar to readers of this journal. By and large, plant breeding must be done at home because varieties introduced from other countries, excepting only adjacent areas of the United States, are rarely well adapted to our conditions. Of course, there are exceptions such as Victory oats.

Nearly all leading varieties of field crops grown in Canada were bred here or, as in the case of Thatcher wheat, in northern United States. Mr. M. B. Davis informs me that most varieties of tree fruits and small

fruits are of domestic breeding, though we have depended largely on imported varieties of vegetables.

Unfortunately, perhaps, we do not have enough space left to name and describe even a few of the many successes of Canadian plant breeders; but I'm sure that readers will be able to provide plenty of striking examples for themselves.

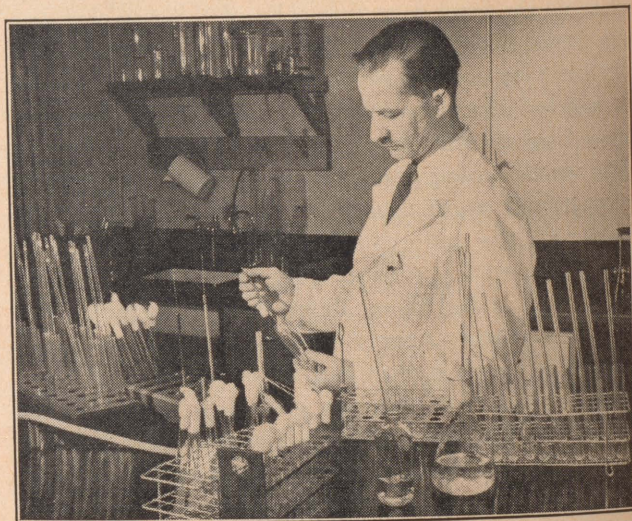
#### Must Go On Forever

Before moving on to the subject of environment, it will be appropriate to stress one important fact. It is this: plant breeding research, like the brook, must "go on forever." We never seem to breed a perfect variety of anything; but even if we did, it wouldn't be perfect for long. As we introduce new varieties, new problems arise.

To illustrate with one example; the very creditable work of United States oat breeders in the development of rust and smut resistant varieties met with very great but comparatively short-lived success because the new varieties were very susceptible to a hitherto unknown disease. As a matter of fact, breeders of hard red spring wheat have been recently "alerted" (not that they were by any means asleep) by the appearance on the western scene of a race of the stem rust fungus capable of attacking popular rust resistant varieties.

Indeed the fungi, bacteria and viruses that cause disease are capable of developing new races, or forms, without any help from us and, as a result, the struggle will never cease. Moreover, insects can do the same sort of thing and so we hear of DDT-resistant flies!

It goes without saying, though I have already used valuable space saying it, that good breeding alone will not produce profitable crops or herds. An enormous amount of first-class talent is devoted to research aimed at understanding the influence and importance of uncontrollable or partially controllable factors such as nutrition, disease, destructive insects and many other related considerations.



Charles Chaplin develops a new method of studying disinfectants, to speed up investigations in this rapidly moving field.



Perhaps the most complicated and by no means least important factor in the environment is our soil. We cannot alter its fundamental characteristics, except by continued bad practices, but neither can we effect even limited improvements without adequate survey data and complicated research on chemical, physical and biological characteristics. Canada possesses an enormous variety of soils, and problems of wise management are as complicated as any confronting agricultural research workers.

Because agricultural research is concerned with the behaviour of living things — crops, livestock, insects, weeds and many thousands of different kinds of micro-organisms, some harmful, some useful — it is perhaps more complicated than any other field of research. Certainly it is as important as any other. Fortunately, it is as interesting to the researcher as it is important to the farmer and to the people who eat what the farmer grows.

## Using Potatoes As Livestock Feed

Many farmers have the opportunity of securing cull potatoes at an economical price. Research at the Michigan Agricultural Experiment Station has shown them to be valuable as feed for some kinds of livestock.

C. F. Huffman, research scientist at Michigan College, advises that up to four pounds of fresh chopped potatoes may be fed to dairy cows each day. The cows should be started on smaller amounts to accustom them to eating potatoes, Sunburned, decomposed, sprouted, and frozen potatoes should not be fed, since they may cause digestive disturbances.

Best results are obtained when the potatoes are fed with good alfalfa hay or other legume roughage. If a "potato flavor" is noted in the milk, it can usually be done away with by feeding following milking.

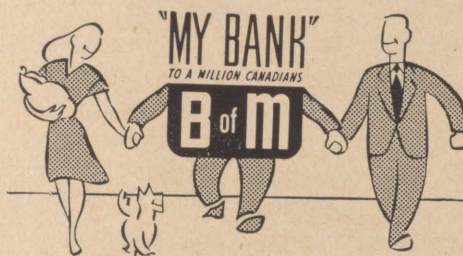
Cooked potatoes make good feed for swine, according to animal husbandry specialists. Cooking makes the potatoes more digestible and increases palatability. Potatoes should be fed in a well-balanced ration with ample protein supplement and minerals. The cooked potatoes should replace not more than half of the grain ordinarily fed in the ration. They may be fed at the rate of two to four pounds of potatoes per pound of grain.

For sheep, fresh potatoes may be used both for fattening lambs and for wintering ewes. For the lambs, one to two pounds may be fed with good quality legume hay and grain. Ewes may receive the same, and following lambing, be increased to four pounds a day. Only potatoes in good condition should be fed.

## Guesses Aren't Good Enough

Soil tests will give you the facts about the lime and fertilizer requirements of your soil.

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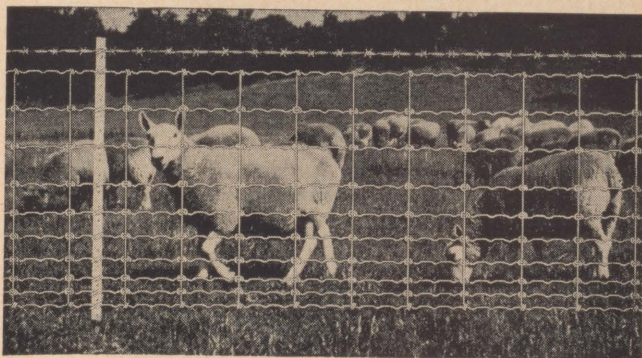


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## Hannam Pays Tribute to Quebec Forums

"The Quebec Farm Forum Association is one of our good member bodies," Dr. H. H. Hannam, president of the Canadian Federation of Agriculture, told the Co-operative Conference sponsored by the association. "If we can only get people into forums discussing farm problems one night a week we'll have an ideal system operation."

Dr. Hannam, who is also president of the International Federation of Agricultural Producers, went on to describe how, through their discussions, forums could initiate ideas and then send them on for consideration at provincial and dominion levels.

"Quebec has the only farm forum group that is a direct member of the Canadian Federation of Agriculture," he said. "But I'd like to see forums recognized everywhere as the local community link of the Federation." During the last 10 years, he continued, forums have done more than anything else in getting Canadians to think nationally.

A talk on co-operation by Breen Melvin, assistant secretary of the Co-operative Union of Canada, was roundly applauded for its direct presentation of sound common sense. Mr. Melvin insisted that, before deciding to start a co-operative, people should be sure that there was a real need for the services it proposed to give, and that there was a core of people willing to put forth all the effort needed to make the venture a success. He also stressed the need to follow sound operating principles, and illustrated this with stories of groups that had got into trouble because they did not adhere to these principles.

Ernest S. Bradley of Mansonville, who had represented the Quebec Farm Forum Association at the CFA annual meeting at Calgary, gave an interesting report of this meeting. He believed that Western members were getting a better picture of Eastern farm problems, and he also believed that they were much more closely organized than Eastern farmers. He stressed the urgent need for Eastern farmers getting together right now to do something about the feed grain situation.

An outline of this situation was given by Paul Blouin, manager of the feed division of the Co-operative Federee de Quebec. Mr. Blouin believed that present high prices for feed grain were caused, not by speculation, but by the big demand for exports of feed to the U.S., where prices were considerably higher than ours. And he saw prospects of still higher prices here, because of the high price of corn in the U.S. He said that recently there had been increased demand for bran and middlings, because their prices were now low in relation to grains.

J. E. Pinsonneault, president of the Co-operative Federee de Quebec, brought greetings from his organization and promised its continued moral and financial support of the forums.

"You are doing a splendid job," he said, "and the Federee will always be ready to encourage and help you,



Many reports were heard at an open meeting of the Quebec Farm Forum Council, presided over by J. D. Lang.

A discussion of the synthetic fleet plan for automobile insurance showed that Quebec forum members were saving \$25 and more a year by securing coverage under this plan instead of getting it individually. It was decided that many more members would want to take advantage of these savings if they knew about them, and plans were made for giving them the necessary information.

### Provide Varied Services

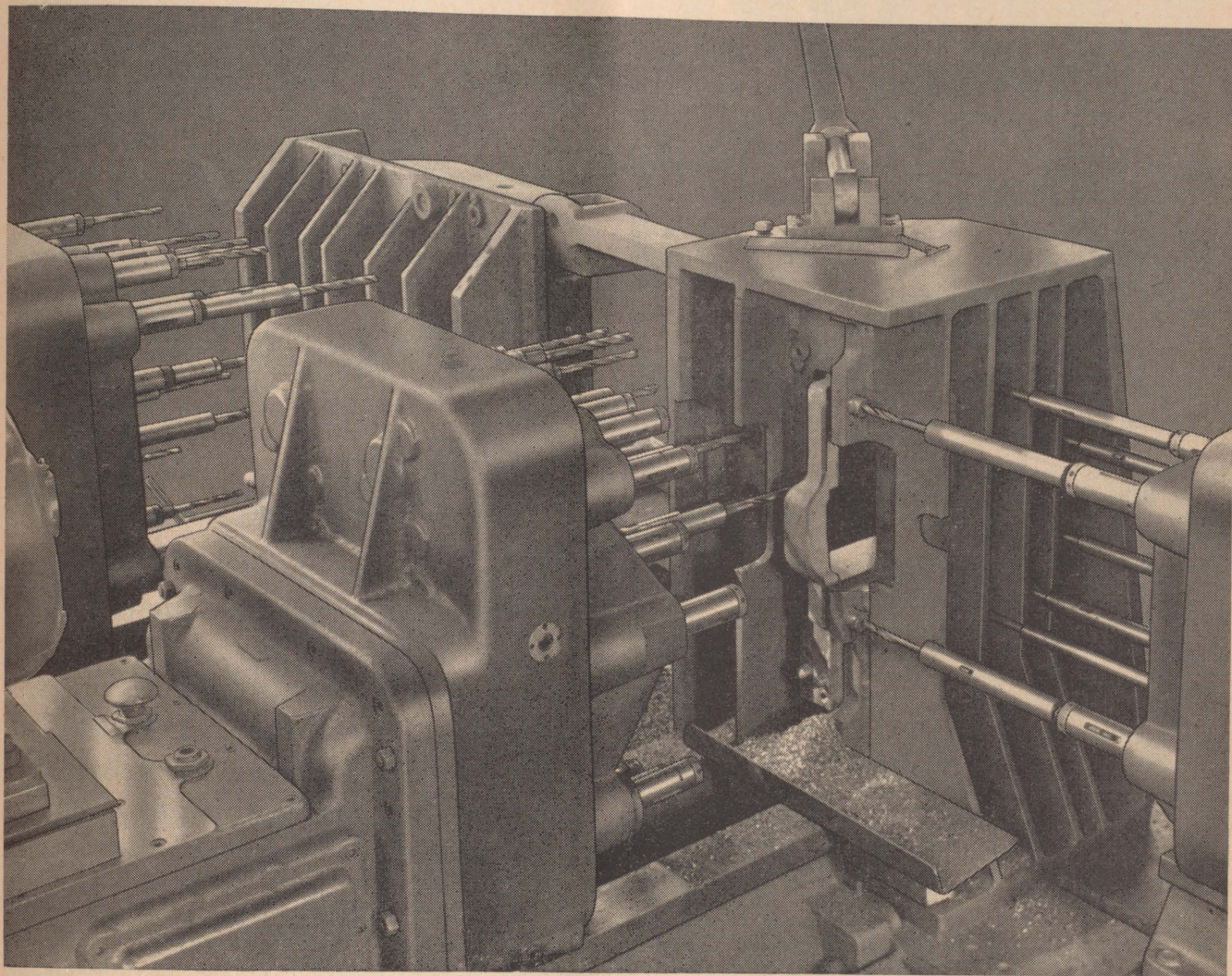
During a session of the Quebec Farm Forum Council several members reported success with schemes for providing members with tangible services. A Huntingdon forum had secured a dealership for fertilizers and livestock minerals, whereby members were saving considerable money. In Argenteuil a mutual fire insurance scheme started by the forums was operating successfully. Other groups had got together to buy carloads of feed, fertilizers and spraying materials. Brome county reported that the district association published a regular news letter entitled "The Grapevine," to keep all forum members in the district informed of what was going on.

Reports were given by the county health service groups in Brome, Gatineau and Pontiac. Walter Kilgour reported that the Pontiac Co-operative Medical Services now have 36 groups and 512 contracts. Gordon Shufelt reported that Brome now has 127 families enrolled and Stuart McClelland reported that Gatineau has 350. Rising costs had forced Pontiac and Brome to reduce benefit payments, and it appeared probable that Gatineau would have to follow their lead. But all reported satisfaction with their services.

Melbourne Dale, secretary of the Clarendon credit union, reported there are now 19 paid-up members and nine more purchasing shares. And Donald Hastings, president of Round Top Credit Union, said it had 22 members and deposits have been sufficient to start a limited loan service.



## AT COCKSHUTT – *Science Serves Agriculture*



If each of these holes had to be drilled separately, tractor prices would skyrocket. However, this multiple drill, one of many in the Cockshutt plant, solves the problem by precision drilling no less than 35 holes in a tractor base at one time. It is another example of the modern, cost-cutting equipment the company has installed to speed production and bring you better farm implements at fair prices.

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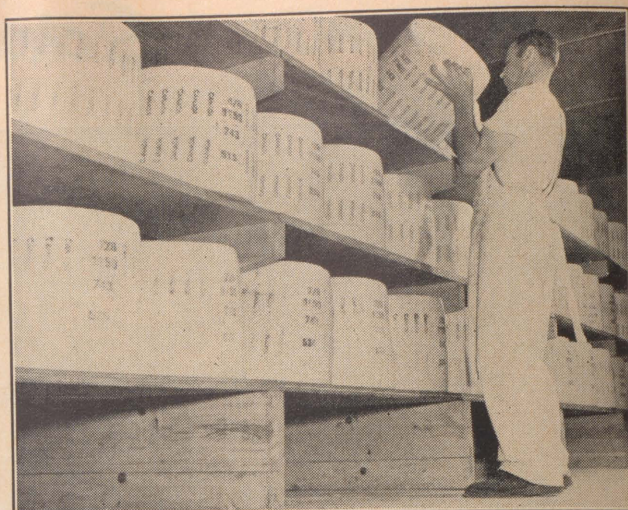


**PARTNERS OF THE CANADIAN FARMER FOR 112 YEARS**





Hogs are paid for on the basis of carcass grading.



All cheddar cheese for export is sold by grade.

# The Mark Behind the Sale

by S. R. N. Hodgins

Director, Information Service,  
Canada Department of Agriculture

**I**T is spring. John Brown, farmer, is rushed with his seeding. Ready for market is his year's clip of wool, a case of eggs, six hogs of correct bacon weight. Holding back his hogs will take feed and probably lose him some quality premiums; nor will the eggs improve with holding. Loading the lot on a truck, he sends them off to market by his new hired man. As all of these products will be paid for on grade, no need for him to be there in person to dicker.

It is winter. Mrs. Stafford Jones, consumer, dreads the cold and wants to get on with whatever housewives do with their time. She 'phones her grocer and orders a pound of First Grade butter, a container of No. 1 Pasteurized honey, two cans of Standard Quality peas (for the family) and a can of Fancy peaches (for company). She buys these graded products "with confidence," to use the slogan of the federal Marketing Service.

It is any time. Zadkiel Robinson, exporter, has a mixed order from Kut or Surinam for Cheddar cheese, skimmed milk powder, frozen egg, plum jam, and cooking apples. He dispatches telegrams to his suppliers, specifying quantities and grades, and with little fuss and no sniffing on his part the cargo is assembled and forwarded. To all concerned, the "grade mark" guarantees the quality — so widely recognized today is the stamp "Canada Approved."

I mention these particular products because all of them (and more) are graded or inspected under legislation of the Parliament of Canada as administered by the Marketing Service of the Federal Department of Agriculture — the Service whose work I've been asked to outline for the Macdonald College Journal.

To get back to the farmer a greater share of the consumer's dollar is one of the main objectives of the Marketing Service, Canada Department of Agriculture. How the Service goes about its job is outlined in this enlightening article.

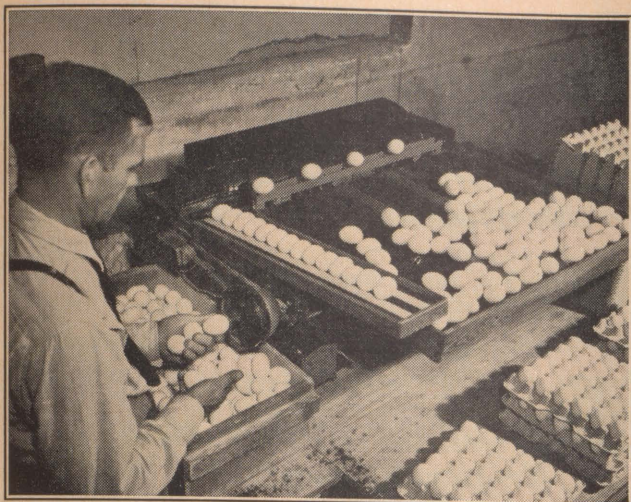
Not all standards relating to farm products are enforced by the Marketing Service. Nor, conversely, are the functions of that Service strictly limited to grading and inspection work.

Officers of the Production Service provide the health inspection of meats and enforce quality standards for seeds, feeds, fertilizers, binder twine. A unit of Science Service inspects and certifies seed potatoes as disease-free. Commercial grains are graded and inspected by the Board of Grain Commissioners of the Department of Trade and Commerce. It is the Marketing Service, however, that enforces federal grade standards of quality for meats, eggs and poultry, dairy products, fruits and vegetables (fresh or processed), honey, maple products. Since these latter products enter so widely into terms of grading and inspection work.

## Variety of Jobs

This Service, however, administers a considerable number of policies not immediately linked with enforcement — payment of premiums for high-scoring cheese and for quality hog carcasses, subsidies for the improvement of ripening rooms and the installing of up-to-date equipment





Eggs are graded to national standards.

in cheese factories, assistance in the construction of public cold storages and potato warehouses. It collects the market news that you see in your newspaper or hear over your radio with respect to live stock, dairy and poultry products, fruits and vegetables. It provides a "Consumer Service" to encourage among housewives, particularly in our cities, the wider use of foods produced on Canadian farms.

It is within the Marketing Service, too, that the Department of Agriculture's Economics Division is located, with its extensive research facilities. This unit provides an economic research service for agriculture as a whole, in production fields as well as marketing, and in fact one of its most important functions is statistical analysis and economic studies required in formulating departmental and government policies. As L. W. Pearsall, Director of Marketing, puts it: "Our economists serve the industry as a whole, but for organizational purposes they are attached to the Marketing Service for pay and rations."

#### A Nation-Wide Service

Let's first look at the units of the Marketing Service that grade and inspect farm products and thus provide a basis for trading — whether the actual marketing is done through provincial marketing boards, through co-operatives, or by "the trade." Forty years ago, Mrs. Stafford Jones would have hesitated to order eggs or butter "sight unseen." When, in 1949, the Agricultural Prices Support Board took delivery of 48,000,000 lbs. First Grade creamery butter, the most expert buyer could not have told the province of origin of any given lot had the box markings been removed. Any box would have been acceptable in any market in Canada.

Obviously we must have nation-wide standards for products that may be sold locally, or moved interprovincially, or go into the export market. That is why health and quality standards governing the movement of farm products out of a province are enforced by federal officials, and why too, in many cases, goods sold within the province of origin (and thus not subject to federal juris-

diction) are graded and inspected under "identical" provincial legislation — often by federal officers holding appointments under provincial Acts for the purpose.

#### Who Does What, and Where

All official grading of meats (hog, beef, and lamb carcasses) is done by federal graders, who are located at the more important slaughtering plants throughout Canada. Some 100 graders are employed on a year-round basis, virtually all of them graduates in agriculture. Eggs, which are collected at myriad points throughout all parts of Canada, are graded by "the trade" but in premises meeting federal requirements, while Marketing Service officers periodically supervise and inspect the grading. About 100 are employed in the actual inspection work, agricultural college graduates being employed if the right type man is available.

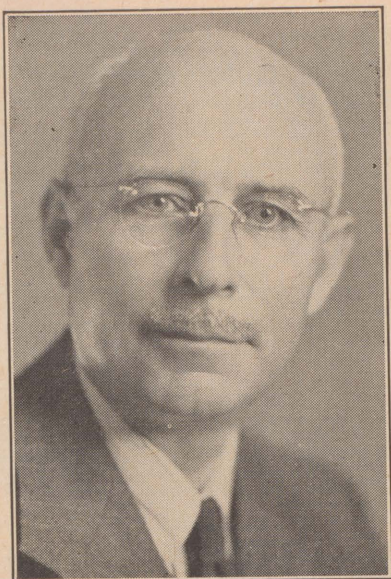
The Dairy Products Division employs about 50 graders and 40 inspectors on a permanent basis, who work in all provinces of Canada. These are graduates of agricultural colleges or dairy schools who have had, in addition, experience in the industry. The latter requirement stems from the importance of flavour in grading dairy products — a matter that requires special skills based on experience. Federal officers grade Cheddar cheese, bulk butter, dried skimmed milk, and federal inspectors check the accuracy of the print butter graded for the consumer market, as they do the quality, weight, etc., of processed cheese, ice cream, and the various concentrated milk products made in Canada as well as of all dairy products imported.

In contrast with the workers with live stock and poultry products and with dairy products, where grading and inspection is carried on the year-round in locations rather evenly spaced throughout Canada, the majority of the fruit and vegetable inspectors are "seasonal" employees



L. W. Pearsall, C.B.E., Director of the Marketing Service for the Dominion Department of Agriculture, was formerly Chairman of the Meat Board.





S. N. R. Hodgins, O.B.E., the author of this article, is Director of the Information Service for the Dominion Department of Agriculture. He was formerly Professor of English at Macdonald College and editor of the Quebec Journal of Agriculture.

who work at shipping points in the more concentrated producing areas during the summer and fall months. About 270 fall into this class, most of them recruited from the industry since they must have practical experience in growing and packing fruit, in identifying disease or other injury, and in appraising proper shipping maturity. Permanently employed are some 20 on canning inspection work and another 50 or so in marketing work at terminals. For these permanent posts graduates in horticulture from agricultural colleges are preferred.

Federal grading regulations apply to all interprovincial and export movements of fruits and vegetables for which grades have been established — and to all canned fruits and vegetables, jams, jellies, marmalades, honey, and maple products. Sales within the province of origin are subject to identical grades under provincial Acts, though the lists of products subject to compulsory grading for local sale varies with the province.

#### Other Functions of the Service

Apart from the Divisions dealing with grading and inspection work as given above, the Marketing Service has four "service" units:

The Markets Information Section prepares and distributes market reports, directly and to press and radio. Here too is centered the assembly and distribution of statistical data on marketings and commercial movements arising out of the work of the commodity Divisions — data of great value to the trade.

The newly-established Transportation and Storage Division will deal with such matters as refrigerated transport, the payment of subsidies to public cold storages, and so forth.

The Consumer Section, with its staff of a dozen trained Home Economists, follows Canadian farm products through to the consumer — testing products and recipes in its experimental kitchens, and passing on its findings to the consumer through press, radio, exhibits, demonstrations, and such attractive booklets as the "Recipe Book for Enjoying Canadian Apples," which you've probably seen.

The work of the Economic Division for agriculture as a whole has already been mentioned. In recruiting its staff, which at present includes about 100 university graduates in its numbers, an attempt is made to secure workers with a sound practical knowledge of agriculture supplemented by advanced training in economics.

#### A Summing Up

Both in functions and in geographical distribution of its officials — from coast to coast and with a few located in the United Kingdom — the Marketing Service covers a good deal of territory. Its objectives were admirably summarized by its Director Luke W. Pearsall, when he spoke at the last annual meeting of the Canadian Horticultural Council:

"Our aim is to develop broader and more remunerative markets for agricultural products, both at home and abroad, and by that and other means to increase the monetary returns of the primary producer. It is the constant objective to improve the quality of our products. We believe implicitly in the thesis that a product properly produced is more than half marketed. We aim to help in developing consumer confidence by maintaining uniform standards of quality.

"It is our objective" continued Mr. Pearsall, "to assist in reducing the cost of merchandizing by promoting more efficient methods of processing and distribution — and of food use. We aim to keep producers advised on market conditions and prices so as to promote intelligent marketing. We think that to the extent that we are successful in these objectives we will help to improve the returns to the primary producer and get back to him a greater share of the consumer's dollar."

#### UNESCO to Study Canada's Farm Radio Forum

"Farm Radio Forum is receiving world wide attention", reported Dr. E. A. Corbett, Director of the Canadian Association for Adult Education at the National Farm Radio Forum Board meeting in Calgary, January 20. "The proposed budget for UNESCO includes a recommendation of \$16,000 to study the structure and effectiveness of National Farm Radio Forum."

Dr. Corbett also drew attention to the October issue of the UNESCO (United Nations Education, Scientific and Cultural Organization) quarterly publication which carried a feature story on National Farm Radio Forum, by R. Alex Sim of the University of Toronto. This publication has world-wide distribution.



# Finding Pegs that Fit

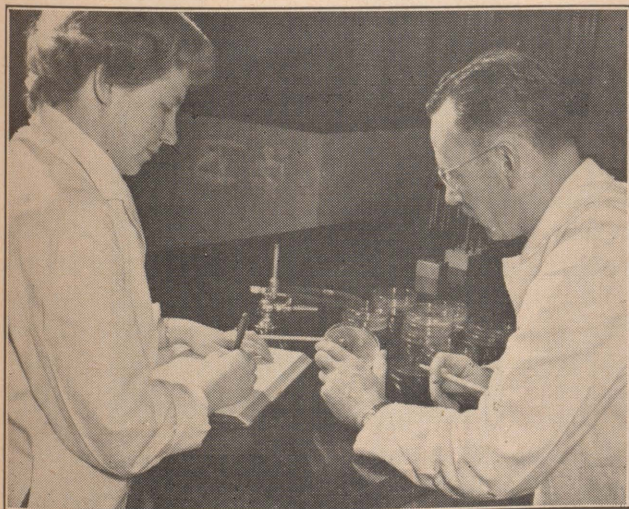
Not every person can do every job, and some jobs require special talents, training and experience. With a diversity of work to be done, the Canada Department of Agriculture needs to find the right man for each job. Here's the story of how it goes about selecting its personnel.

by W. B. Brittain

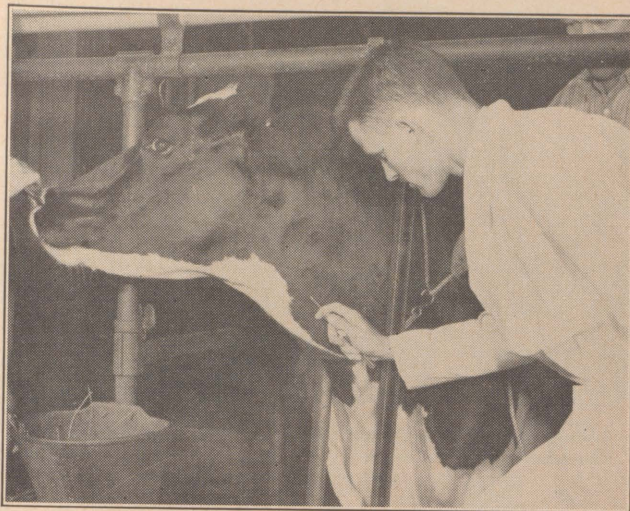
Assistant to the Director, Science Service,  
Canada Department of Agriculture

IT is gratifying to receive a request from a farm journal for information on the conduct of affairs in the Dominion Department of Agriculture. It is hoped the implication to be drawn is that the rural readers want to know, as producers and tax-payers, how their interests are being guarded. A great deal of effort and expense is devoted to disseminating the information derived from our research but there is seldom an opportunity to explain the organization of the work.

Before discussing the actual methods of how the Department secures the right man for the job it would be well to consider briefly what the job is and what kind of people are needed to do it. The problem of placement, of getting the man into the type of work where he can make his greatest contribution, may then appear in its proper magnitude before the readers' eyes.



Miss J. R. G. Smith and G. B. Landerkin find that one type of root rot can be checked by antibiotics.



Drawing a blood sample for Brucellosis test.

The primary job is one of shaping and conserving the land. Soils investigations are directed towards the determination of systems of soil management and irrigation that will increase soil fertility and give most efficient crop production; the classification and mapping of soils by cooperative soil surveys is a related feature of this work.

The job is concerned with the feeding, breeding and management of livestock and with the processing, grading, inspection, transportation, marketing, and storage of plant and animal products.

The Department's research program also covers research on diseases of animals, plants and trees, control of harmful insects and many phases of production and marketing.

Animal pathologists and husbandmen investigate the cause, prevention and treatment of diseases of farm animals and they pursue investigations of feeding and other husbandry problems. Veterinarians have had marked success in the control and eradication of disease.

Entomologists conduct research to determine principles of control or eradication of harmful insects of plants and animals and of utilization of those which are beneficial.

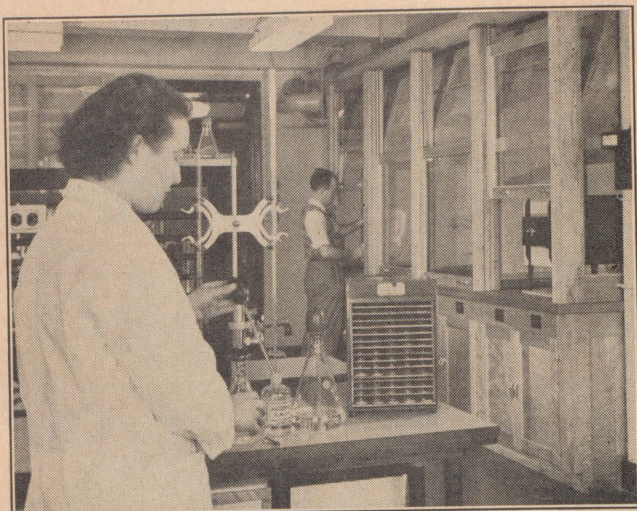
Botanists, plant pathologists, plant breeders, agronomists, field husbandmen and horticulturists tackle the problems of production and improvement of farm crops, fruits, vegetables and other plants; plant diseases, including diseases of trees, soil management, irrigation and fertilizers.

In all these fields assistance is given by the chemists, bacteriologists and others, all of whom have their own particular problems in addition. Another phase of the bacteriologists' work concerns the marketing and storage problems of dairy products.

Agricultural engineers work on problems concerned with improvement of farm machinery and the design of efficient farm buildings.

The Home Economists are constantly seeking and pub-





Using radio-active tracers, Miss A. Neilson and W. M. Davidson carry on research studies on Vitamin D, calcium and phosphorous.

licizing new and better ways of preparing tasty and nourishing dishes from farm produce.

When the job is as complex as this incomplete account reveals, the matter of selection and placement of staff is not simple. Fortunately, from our point of view, agriculture-minded students are the grist for a selection mill, which is in operation from undergraduate days and one which makes the placement problem of a size that can be handled.

### Many Fall by the Way

For every professional worker who enters the Department, a large number of aspirants have fallen by the way. Some have lost interest and have moved to other fields; many have been dissuaded from pursuing their plan of life devoted to investigation and research by wise counseling on the part of college and university staffs. By the time a man or woman enters the Department aspiring to become a research or any other kind of worker he has already been exposed to a sizeable selection process.

However, since farm problems are legion and there is a limit to the size of staff, it is essential to operate a more vigorous selection process to ensure that only the most able enter the Department and remain.

In many cases the Department, by presenting opportunities for summer employment, can see potential employees at work and can assess their ability and aptitude over a period of several seasons. Each summer, when field work is at its height, the Department employs a large number of "Student Assistants". The plan serves a four-fold purpose; it supplies the extra workers required during the summer; it provides unexcelled opportunities for students to tackle practical problems related to their studies; it provides valuable yet inexpensive training for students; but above all it is a testing ground for potential employees.

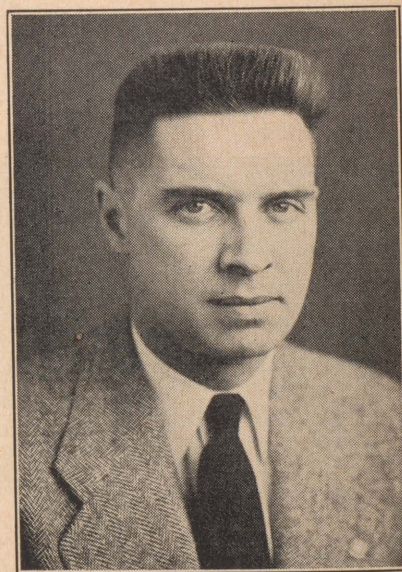
Performance at this time is closely watched by the research staff. On the basis of their findings recommenda-

tions are made on promising individuals for re-employment in succeeding summers and following graduation. If aptitude for the work is lacking, it is pointed out. It is not too late for the student to adjust his course of study if he so wishes and he may be saved years of unfruitful and costly study by accepting this counsel. There are many fields of endeavour in the Department which do not involve research but which require staff well trained in agricultural science. By following up these various avenues very frequently he can remain in his chosen field and render valuable service to agriculture.

### Not Always Possible

It is not possible to give all new full-time staff the careful screening which is possible with the students who work for the Department every summer between college years. One reason is that only the Science Service and the Experimental Farms Service require appreciable numbers of extra workers during the summer. Thus the Marketing and Production Services are unable to assess the capabilities of applicants for positions on the basis of first-hand knowledge.

A second reason which prevents a complete screening is the fact that all new appointments are made in order of merit from eligible lists established as a result of open competition. Competitions and the so-called eligible lists are administered by a central recruiting agency, the Civil Service Commission. Any person who feels he has the required qualifications can apply for positions which are advertised. Rating Boards composed of Departmental and Civil Service Commission officers review all applications and eligible lists are subsequently established. Often, high ranking candidates have never worked in the Department.



W. B. Brittain, the writer of this article, is Assistant to the Director, Science Service, Canada Department of Agriculture. He was formerly Assistant Personnel Officer for the department.



Since no examining selection process is perfect, it is inevitable that occasional appointments are made which later prove unsatisfactory.

It therefore is of extreme importance, particularly in the early stages of a man's career, to take positive steps to ensure that he is in the right job and if he is not, to direct him along the path where his talents can be most efficiently used. To accomplish this problem of placement, every employee joins the Department on a probationary basis and for the first year everything possible is done to see him properly started on his way. At the same time a very close watch is kept on his work to determine how well he is grasping his problem. At specified times reports are made on his progress and at the end of his first year his case is reviewed by a board.

The board's decision can be one of four; it may be that the man has demonstrated that he has the makings of a good entomologist, economist, horticulturist, veterinarian and so on and should be retained. Or the board may decide that he requires a further probationary period before a decision can be made. Or it believes he would be more profitably employed in some other line of work suggested by the board. Or the decision may be that there is no place for him in the Department and he should be released.

At this point it might be well to acknowledge existence of the legend that Government employees enjoy complete security of tenure. The legend may have some foundation in fact from bygone days. If it has, then later generations are to be credited with the accomplishment of effecting such a change in policy — that now there are but few round holes filled by square pegs.

The staggering numbers of problems which interfere with agricultural production demand the attention of a staff much larger than the country can support; nothing less than the best men available are acceptable.

#### Probation Never Ends

Although the first year of employment is the most definite probationary period, probation, in fact, never ends. No one is ever beyond the influence of this process. Replacement goes on continually in a progressive organization; and the organization can only be progressive as long as that practice is followed.

The only way that such a relatively small organization can provide the farmer with the kind of service he requires is by having capable leaders directing a capable staff which is productively devoted to the solution of agricultural problems. We can boast of such a staff, thanks to careful selection, careful placement and replacement, and sound promotion programs.

#### Make Sure About Seed Grain

It's a good idea to check the background of the grain you buy for seed. This is especially true if the variety is one that isn't too well known.

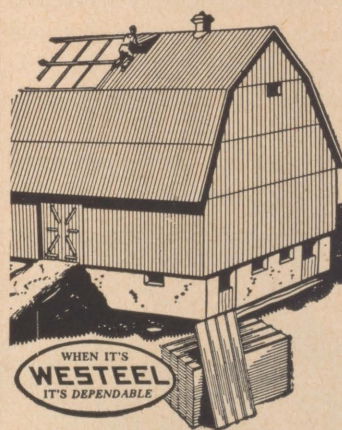
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# An Ag Rep's Diary

by Donald M. MacKay  
Agricultural Representative,  
Hants County, N.S.  
as told to J. S. Cram

**A**S Agricultural Representative in Hants County, my job is to do all I can to help the farmers in my territory. This I do by promoting the policies of the Nova Scotia Department of Agriculture — policies for the improvement of farming and the development of conditions favourable to farm life.

I pass on to farmers information that will be useful to them; I syphon back to the department details of local problems so that experts can go to work on them; and I help to build up groups through which our farmers may handle their own affairs effectively.

I'm only one person, and I'm responsible for a whole county. Obviously I can't keep in touch individually with every farmer in the county; so I work as much as possible through organizations. The biggest of these is the Hants County Farmers' Association, which has 700 members. It is based on 10 district farmers' associations, which hold monthly meetings and take on projects such as promoting calfhood vaccination or lime spreading.

The smallest units in the farmers' association set-up are the farm forums, which are really the nuclei for development of rural organizations from a community standpoint. There are 30 local forums in Hants County this year, carrying on action projects such as building skating rinks, studying co-operative principles and developing credit unions.

In small groups such as these forums, people get experience and information which prepare them for leadership

In the horse and buggy days most people thought of the ag rep's job as driving around to visit every farmer, talk over his problems and provide ready-made solutions. Now it's generally recognized that, with today's highly specialized agriculture, such an approach is neither possible nor desirable; the ag rep's time can best be spent by working primarily with groups. Here's how one man does it.

in other organizations. To step up this process, group leadership short courses are sponsored by the Hants County Farmers' Association in co-operation with the Department of Agriculture and Marketing, and the Adult Education Division of the Department of Education. Informal group discussion is the main technique of these short courses, and each person who attends has a chance to lead discussions on matters of current interest.

Because people attending these two-day short courses felt there was a need for more intensive study, 10-day folk schools have also been developed. Here the motto is "Learning by Doing," and the participants have a chance to develop many of the skills needed in farm organizations.

Besides farmer's associations and forums, there are



Kempt Shore Farm Forum, one of 10 forums in Hants County, N.S., which serve as nuclei for development of farm organizations.





Donald W. MacKay, the source of this article, is shown in right foreground discussing organization problems with fellow-participants at Camp Laquemac, the School of Community Programs sponsored by Macdonald College and Laval University.

groups interested primarily in some special aspect of agriculture such as livestock development. Take, for example, the Hants County Guernsey Breeders' Association. The 10 societies in the county work with junior clubs, which usually have monthly meetings at each of which they study a certain livestock topic, while learning how to conduct meetings in an orderly way. They also hold shows, where club members demonstrate what they have learned about fitting, showing and judging calves.

### Activities for Each Month

Now, having given an idea of the organizations with which I work the year around, I'll describe the main things that keep me going for each month of the year.

Usually during January farm organizations hold a series of meetings following a definite program, in which the ag rep is expected to take part. This I am glad to do, although in bad weather I'm not able to get to every meeting; sometimes I get stuck in a snowbank or slide into the ditch, and by the time I get my car out the meeting is over. Or even if I do get there attendance may be poor, because other people can't get through. Things like this need to be considered when planning programs.

Usually key leaders for an area are called together during January to map out a program for the year, following the needs and wishes of their members. Sometimes it's possible to plan a general program for the whole county, which will include a variety of projects that can be worked in with the general program. Once the plan is mapped out I have to keep it constantly in mind, so that it will be carried through if at all possible.

In February I start outlining details of the program, and discussing them at different meetings. Farmers are kept informed of developments through the press and radio; and films are useful in putting across ideas.

Late in February or early in March junior clubs come into the picture. It is usually necessary to help them

reorganize for the coming year, and see that they get away to a good start with their various projects.

In March and April farm organizations in some areas sponsor short courses, and the ag rep is usually called on to help in planning the program and lining up speakers. Specialists such as field crops men, agricultural engineers and poultry or orchard experts attend these short courses and present information that will be useful to local farmers. Naturally, short courses held at this season are subject to a great many whims of the weather.

With the bright, sunny days of May comes the planting season, and with it a demand for lime, which is distributed under a provincial policy. The ag rep has to look after orders and see that arrangements are made for distribution of the lime when it arrives in carlots. This is becoming a bigger task each year, as the movement toward grassland farming in the last couple of years has interested many farmers in liming.

By the middle of June the farmers are beginning to cut grasses and clovers for grass silage. A lot of them are putting it up in trench silos, which have had quite a warm reception in the province, since they're not only cheap and easy to construct, but they require little equipment for making silage. At farm meetings at this season, the methods of putting up silage are usually a live issue.

In June, too, I usually meet with county committees and district associations to plan field days during the summer and to deal with plans for the county exhibition. Then sub-committees are set up to look after various aspects of the work.

July is loaded with field days and picnics. There are speakers to meet and take around, and a lot of other arrangements to make. There are visits from specialists who want to inspect crops during the growing season; and there are preparations for fall fairs to be looked after.

Then in August and September come the club fairs,



An N.S. group hears a talk on co-operatives by an expert from Nicaragua, as part of a study program.



where the ag rep has to see that everything is in order for the events, and that they are run off smoothly, and then compile the official reports. Sometimes the winners in the local shows go on to compete at the county exhibition, which is held in September.

### Busy Time at Exhibition.

For weeks before the county exhibition there are committee meetings, and jobs to be done, and oversights to be rectified. During the four-day exhibition there are a lot of things to be kept moving or straightened out; and afterwards there are lists and reports galore to get out. Then it's time to get together with more committees to plan group leaders' short courses.

Plowing matches usually create considerable interest during October. Last year I acted as secretary of the Provincial Plowing Match, and found it rather interesting to work with men who were former champion plowmen. It was a real success, with a good turnout of spectators and the largest number of contestants ever to enter the N.S. provincial match. Demonstrations of various types of lime spreaders and spraying equipment drew keen interest at this event, which wound up with a well-attended banquet.

During October the district farmers' associations and other groups hold their annual meetings, and plans are made for organizing farm forums. Delegates are appointed to attend the county meetings, and resolutions are drawn up on subjects which require attention.

November brings the annual meeting of the Hants County Farmers' Association, where final plans for the county are outlined and delegates are appointed to attend the provincial convention. Farm forums get under way, and start to make plans for their action projects.

When December rolls around it's time to start in on my annual report. This involves reviewing all the work done during the past year and reporting it in detail — in short, giving a complete account of how I've been spend-

ing my time during the last 12 months, and the results that have been achieved.

I have to check over all the activities I've mentioned here, and the regional or provincial conferences I've taken part in, and any course I may have taken to help me do a better job. When I've finished I've a lot more perspective on the year's work, and an idea of what should be the chief targets for the next year.

Of course, all the time that I'm trying to concentrate on getting information down, the phone keeps ringing and the mail keeps bringing in letters that have to be answered, and people keep coming in for information or for help in filling out forms just as in any other month. But why shouldn't they? Anything that will help Hants county farmers is part of my job.

## Annual Meetings Rated High as Education Medium

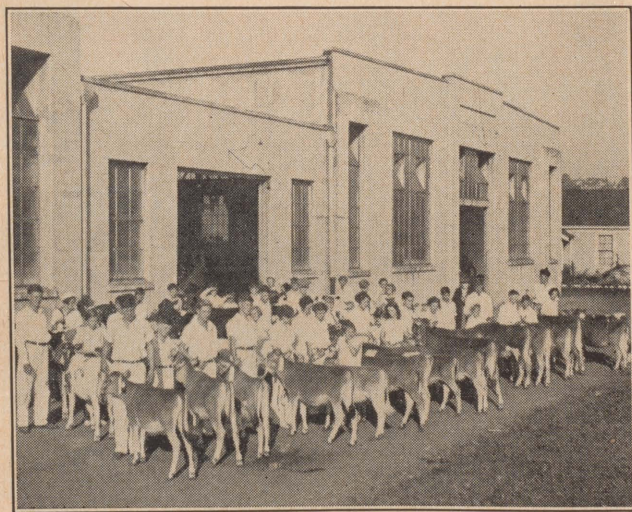
Farmers' cooperatives in the United States use at least a dozen major educational devices to build and maintain good relations with their members and the public, according to a study of 237 leading associations recently completed by the Farm Credit Administration in cooperation with the American Institute of Cooperation. Published as Farm Credit Administration Miscellaneous Report 140, the report is entitled "Educational Practices of Farmer Cooperatives."

These farmer organizations reported annual meetings and personal contacts about equally important in this job. Ranking next were monthly publications, local discussion groups, circular letters, and periodical reports. Following these were radio programs, all family programs, cooperative future farmers of America and 4-H Club projects, and educational exhibits. Mentioned least frequently were discussion outlines.

In addition to the above, cooperatives replied that they were attacking the problem in various other ways. Leading this supplementary list were educational meetings, courteous and efficient employees, motion pictures and film strips, member participation, and interagency relations. Used to a lesser extent were special publications, educational tours, market news services, social events, contests and awards, women and youth programs, magazine and newspaper articles, and educational-type advertisements.

In about half the associations reporting, the manager takes the major responsibility for the educational work. In the remaining associations, some other official, a public relations employee, an educational or editorial employee or a field worker does this job.

The report includes a directory of the farmer cooperatives mentioned in the study and gives illustrations of the educational work they are doing.



A lot of time is spent on junior club work.



## Can We Duplicate Malabar Farm?

"What Louis Bromfield has done on his Malabar Farm in Ohio can be duplicated on practically any farm in Nova Scotia," F. W. Walsh, N.S., Deputy Minister of Agriculture and Marketing, told the Nova Scotia Branch of the Agricultural Institute of Canada. In discussing Malabar Farm, and several other agricultural areas which he visited last summer, Mr. Walsh indicated that, in every instance, the districts in which attention was being directed to the three "L's" of good agricultural practice—Lime, Legumes and Livestock—agricultural progress was both noted and marked.

"We, here in Nova Scotia, have just as good soil as Louis Bromfield has in Ohio," said Mr. Walsh, "and, if we can get every farmer in Nova Scotia growing the crops he is growing, using the grass ensilage he is using, using trench silos, using pen barns, and so on, we can have the farmers of this province growing beef, producing mutton, and making milk 25% cheaper than it is costing many of the better farmers of the province today."

In New York, Massachusetts, New Hampshire and Maine, where climatic conditions closely approximate those of Nova Scotia, lush pastures (heavy in legumes), grass ensilage, early-cut legume hay, and good livestock play an important part in reducing feed costs. Where soils are acid, Mr. Walsh found that limestone was applied generously.

The main general conclusions which Mr. Walsh felt might be drawn from the trip he made last summer were that farmers in Nova Scotia (1) Have the soil and climate necessary for good agricultural production; (2) Can duplicate what is being done by the best farmers in other areas; (3) Should remember that the application of ground limestone is a "must"; (4) Should use legumes of suitable varieties; (5) Should consider the wider use of ladino clovers in pastures; and (6) Should use more alfalfa, sweet clover and probably birdsfoot trefoil in soil rehabilitation.

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# After College—What?

by A. B. Walsh

If the master of ceremonies on a quiz show were to ask "What becomes of men who graduate from an agricultural college?" he would probably, in nine cases out of ten, get the reply "They become farmers". But this answer wouldn't win any prize.

The authorities at Macdonald College have been looking into this question, and have turned up a lot of interesting information about the type of work that graduates from the degree course in agriculture go into when they have finished their college work. In making the survey, they based their report on Macdonald College graduates, for the simple reason that they know more about them than about graduates from other institutions. But in the broad outline, the same pattern is probably to be found among graduates elsewhere.

Where, then, do graduates find employment? Well, a lot of them, of course, become farmers. These are, for the most part, boys who came to college from farm homes, with the intention of returning to the home farm after graduation. But these are by no means in the majority. Macdonald College graduates are to be found in a wide variety of occupations, but most of them are in work that is at least indirectly connected with agriculture.

One of them is Dean of the Faculty of Agriculture of McGill University; many others have joined the staffs of universities in Canada and in other parts of the world. One is a university president. Others are directors or principals of schools or colleges. Staffs of the Departments of Agriculture maintained by the Federal and Provincial Governments are graduates — superintendents of experimental stations, chiefs of divisions, experts in all sorts of subjects, got their early training here.

## Wide Variety of Jobs

One of our graduates has recently retired after long service as Director of Agriculture for British Guiana. Another is in charge of the Information Services of the Dominion Department of Agriculture. The chief of the Livestock and Poultry Division in the Production Service at Ottawa, the Dominion Horticulturist, the assistant to the Minister of Trade and Commerce, are all graduates of the College.

In many business and manufacturing firms, especially those dealing with products used by the farmer, the executives call Macdonald College their alma mater. The manager of the Canadian Fisheries Council, and the secretary of the Adult Education Division of the Department of Education in Nova Scotia went to college here.

Canada's agricultural colleges have trained a number of men from other countries, who are now putting their

knowledge to work for the benefit of their own people. In the West Indies, for example, an increasing number of our graduates are employed by their home governments in a programme of improvement of local agriculture, and the headmaster of the Jamaica School of Agriculture is one of our graduates. One of our chemistry specialists is teaching in the University of the West Indies.

Instances such as have been mentioned could be multiplied many times, but it is not the intention to make this a complete register of employment. What we have tried to indicate is that, all over the world, graduates of agricultural colleges are found in positions of responsibility and trust, giving their services in a wide field of endeavour.

## Changes in Pen Barns

Several hundred farmers in New York State have now had a few years experience with pen barns. A few of these farmers have gone back to stanchions, but most of them have stayed with the pen, after making some improvements in their methods.

One of the biggest problems has been fouling of the litter around feed racks and water tanks. This has been solved in several different ways. One way has been to partition off part of the pen for feeding and watering, and clear this part out daily. Another has been to water outside the pen, in heated tanks, and feed from racks mounted on wheels, which can be moved to a different spot after each loading.

Generally, they have found that loose manure needs to be cleaned up daily to keep the cows clean, with complete clean-outs a couple of times a year. It is also essential to provide plenty of rack space, so the more aggressive cows won't hog the feed.

Some farmers are penning their young stock separately, so they can be given a different feed mixture. And several have added an extra door to the pen, so there's one for entering and one for leaving; this checks fights between traffic going in different directions.

Where fixed position feeders are used, it has been found advisable to provide some means of raising and lowering the feeders, to adjust them to the bedding level in the pen.

These farmers generally find that penned cows need twice as much bedding as stanchioned cows. There has been a strong move toward paving the exercise yard, to help keep litter clean. And it is generally agreed that pen stabling is not meant for the careless dairymen.





## DEPARTMENT OF AGRICULTURE

*Activities, Plans and Policies of the Quebec  
Department of Agriculture*

### Ayrshire Breeders Assert Their Views

With most of the routine business disposed of, the Canadian Ayrshire Breeders, at their annual meeting in Montreal on February 9th, 1951, got down to the vexed question of the location of the new head office building, plans for which have been discussed pro and con for months past.

It will be remembered that last year's annual meeting authorized the Board of Directors to select a location and draw up plans for a new Head Office for the Association, reporting back to the 1951 meeting for approval before actually starting work. The directors appointed a building committee and put on a drive for funds, which raised some \$23,000. The building committee went at its task with enthusiasm; a little too enthusiastically, in fact, for in their desire to do a good job they went so far as to buy a lot in Brockville, have plans drawn up and bids submitted. The Brockville location was chosen as being most suitable; the building committee thought that living and operating costs would be less there than in a large city, and that Brockville is centrally located so that the affairs of the Association could be carried out efficiently from there.

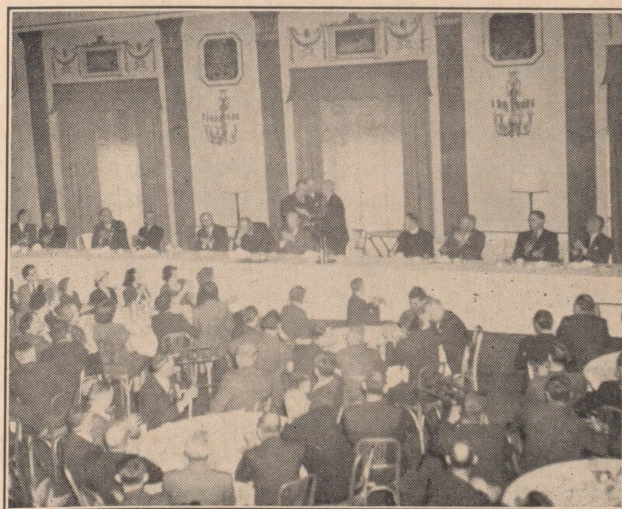
But in their enthusiasm, they completely overlooked the requirement of reporting back to the 1951 annual meeting, and it wasn't until late in the fall that this was brought to their attention. So they shelved everything until they could get confirmation of their actions from the membership.

They didn't get the confirmation. By a vote of 132 to 67 the annual meeting instructed the directors to keep the head office in Ottawa, then on a second vote authorized them to secure a site and put up a building in Ottawa. So now the Brockville property will have to be disposed of, a search made for a suitable location in Ottawa, and bids called for construction. Costs are bound to be higher; whereas it would have been possible to build in Brockville for about \$23,000 last fall, at the time the operations were suspended, tenders opened just before the general meeting showed costs (still for the Brockville location) to have jumped to \$34,000, and it will likely cost still more to build in Ottawa. Then there is the question of building materials, and whether or not such a building will be considered "essential" by those controlling steel and other building supplies. Headaches are in store for the directors, but in a democratic organization, the wish of the majority is law.

In its new building, the Association will look after its own records of registrations, transfers, etc. In the meantime, this work will continue to be done by the National Livestock Records Office; but the meeting voted to give notice of the Association's intention to withdraw from this organization eventually.

The report of the secretary recorded a number of new high points in the history of the Association: membership 2,515; registrations for 1950, 13,567; transfers, 11,296; exports 2,535; total revenue, \$65,549. All these figures are higher than they have ever been before. This is the last of twenty-four annual reports prepared by veteran secretary Frank Napier, who has resigned his position, and in future this will be one of the tasks of Wilson E. Richmond, the new secretary-manager, who was introduced at the meeting. But Frank Napier's impending departure was not allowed to pass unnoticed; P. D. McArthur gave a very moving and heart-felt tribute to Frank's years of untiring effort; he was made a life member of the Association, and presented with a gift at the banquet later.

J. R. Pelletier, reporting on the activities of the Publicity and Extension Committee, urged that herd test plans, and type classification of bulls be maintained and actively promoted, and that some system of awards for outstanding animals be instituted. The committee thought that with artificial insemination coming more and more into the fore-



Part of the crowd and head table guests at the annual luncheon of the Canadian Ayrshire Breeders' Association.



ground, the classification of bulls on the basis of the performance of their daughters was particularly important.

Prof. Toupin brought in the report of the committee on improvement and classification, showing that 59 herds, totalling 917 head, had been classified during 1950. The herd of Dagg and Son of Shawville had headed the parade with an average score of 87.83%.

The committee also recommended that the present methods of running the R.O.P. tests should be continued. They had made exhaustive studies of the daily versus monthly weighing schemes, which showed a variation of some 3% between the two. The Canadian system seems simpler and just as accurate as either the Scottish or the American systems, and the committee came out in favour of monthly weighings under the supervision of an inspector. A motion to amend the regulations to permit either daily or monthly weighing, at the discretion of the herd owner, was defeated. The report of the committee was accepted, and they were asked to continue their investigations on this point.

Lorne Evans thought that past presidents of the Association should receive some recognition of the fact that they had held a high post in the organization. He felt that a scroll, or certificate, or some similar memento would be deeply appreciated by all past presidents. The members agreed with him and passed a motion authorizing this to be done.

It was left with the directors to select judges for all shows with the exception of the Royal Winter Fair, nominations for which were called for at the meeting. On vote, Robert Seitz was selected, with William Gibson as alternate. Other judges appointed were S. J. Chagnon for Quebec, Gilbert Muir for Ormstown, Carlyle Watt for Lachute and the C.N.E., A. F. Cains for Ottawa, A. Gushart for London, R. O. Biggs for the Ottawa Winter Fair.

### Plea For More Efficiency

Stan Chagnon, a past president of the Association and now back in agriculture as vice-chairman of the Agricultural Prices Support Board, was the luncheon speaker. He felt very strongly that with millions of people in the world being hungry every day, living in countries that do not produce enough food, we in Canada should be doing more to help feed them. The idea of Canada and the United States trying to import meat from New Zealand was one that left him aghast, and he could see no reason whatever why Canada of all nations should find it necessary to import butter, cheese and other milk products.

A better distribution of Western feed grains could and should be worked out, and more efficient use of pasture land in Eastern Canada is an absolute necessity. Costs of production on dairy farms are too high, and one of the chief reasons for lack of efficiency is the low average production we get. There are far too many 4,000 pound

cows in our herds; such a cow is an economic liability and not worth keeping. "Nothing will take the place of efficiency, and the proper use of land, labour, and feed", he stated emphatically. "Farmers should think more of their responsibilities and duties and less of their rights."

### Elections

The new president of the Association is J. Stuart Hyde of Dundas, Ont., and Maurice Joubert is vice-president. Members of the executive for Ontario are John Ballantyne of Attwood and Donald Cumming of Lancaster, and for Quebec, S. Wyman McKechnie and Roland Pigeon.

The Montreal meeting elects six directors from Quebec, voted on by Quebec and Ontario members only. Out of a panel of nine nominees, the meeting selected Messrs. Douglas Ness, Wyman McKechnie, Roland Pigeon, Nicholas Kelly, Maurice Joubert and J. P. Lizotte, the president of the Quebec Society.



Frank Napier, long-time secretary of the Canadian Ayrshire Breeders' Association, makes his last official appearance at the annual meeting.

### For Better Maple Syrup

Sugar bush owners in the counties of Richmond, Comp-ton, Sherbrooke and Shefford held a series of meetings late in February to hear experts from the Department of Agriculture discuss sugaring practices, good and bad.

Napoleon Rompre, maple products specialist from the Quebec Department, did an excellent job of explaining the proper techniques of tapping, gathering sap, boiling, etc., and insisted on the necessity for absolute cleanliness if a product of first class quality was to be obtained.

J. Methot, provincial apiculaturist, outlined the regulations which govern grading and sale of maple products, making a special point of the fact that one or two careless farmers who ignore the regulations can do enormous damage to the general reputation of our maple products, on the home market and in other countries.

In charge of the various meetings were agronomes Donat Salvais, J. P. Scott, W. G. MacDougall and J. M. A. St. Denis.



## Pomological Planners Meet

The weather man seems to have it in for the pomologists these days, at least when they plan meetings. The summer get-together in the Frelighsburg area was rained out, and one of the worst storms of the winter blocked the roads and prevented many members from getting to the first session of the winter meeting, held in the Queen's Hotel in Montreal on February 8th. There were less than 50 people in the Spanish Room when Floyd Stevenson got up to read his presidential report; but people kept straggling in all day and attendance was well up to normal by the second day of the meetings.

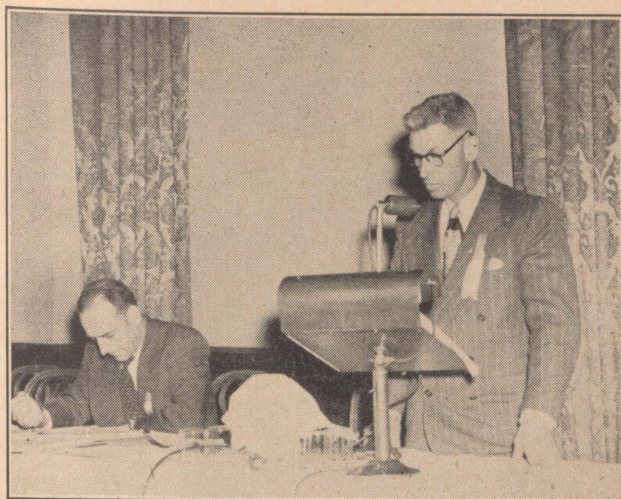
Two major points were dealt with by the president. One was the advertising campaign which was carried out during the marketing season, and about which we shall have more to say later. The second was the problem of cull apples, the main outlet for which now is the juice plant at Rougemont, which uses a large amount for apple juice and some for apple sauce for industrial use. Some cider has also been made, experimentally, with apparently good results, and this product, if it were possible to market it, would greatly increase the quantity of apples that could go through the plant. Growers should co-operate with the Directors of the Society in urging that legislation be passed permitting sale of this product.

Mr. Stevenson pointed out that the total crop in 1950 was about two million bushels; less than in 1949, but marketed at higher prices for packed and graded fruit. But costs of production, of containers and equipment to market the crop have all advanced, with the net result that growers are getting something like 25¢ per bushel less than they received in 1938. As was brought out in the report of the marketing committee, in 1950 the cost of growing, preparation and selling of a bushel of apples was something like 70¢ more than in 1938, while since then the price of apples increased about 50¢ — and costs are likely to go still higher next year.

The only way growers will be able to increase their revenues will be by reducing production costs. The use of good spray materials for cleaner fruit is of primary importance; better timing of the sprays is very essential. Any methods of economy that can be used in handling and marketing the crop must be used. Demand for good quality fruit is still higher in Quebec than is our capacity to supply.

### Publicity

The radio advertising campaign which was carried out during 1950 cost the Society about \$6,000. Grocers in the city who had been questioned thought that to some degree the campaign had been a real success, and they had found that as soon as the campaign was finished, the demand for Quebec apples dropped. Advertising was carried over six French language and three English language stations for a total of 69 broadcasting days and a total of 690 separate announcements were broadcast during the period,



Floyd Stevenson delivers his presidential address as Jacques Berthiaume studies the agenda of the annual meeting of the Pomological Society.

not counting a number of free mentions of Quebec apples over some of the stations. The campaign director thought that the daily listenership was over half a million. Household and cooking experts gave full support and Quebec housewives were given innumerable recipes suggested by two of the foremost counsellors in this domain, Miss Rejeane DesRameaux, and Frances Robinson, and naturally these recipes always featured "those fresh and delicious Quebec apples."

But while satisfaction with the campaign had been expressed by a number of agencies, there had been absolutely no reaction from the growers, only three of whom had made any financial contribution to its cost. From the floor, a number of suggestions were made as to how this could be financed in another year, for it is evident that it cannot continue to be paid for out of the Society's funds. One suggested a tax on containers; another a tax on orchards levied by the municipalities; another a tax on insecticides and fungicides. Everyone was in favour of continuing the campaign, as shown by a vote, but nobody could come up with a workable idea as to how to support it. Finally Ed. Duchesne proposed that a contract form be sent out to growers, asking for subscriptions for the 1951 campaign. If enough support was obtained as a result, the campaign would be organized; if not, the Society would be authorized to drop the whole idea. It was also suggested that the list of subscribers be published. A rather indecisive vote apparently gave approval to the scheme.

### Secretary's Report

The Secretary's office finds that one of the discouraging parts of its duties is the collection of membership fees. Apple growers in Quebec seem strangely reluctant to pay fees to the Society, though they are glad of the benefits they receive from its activities. The services of the Society are continually being added to, but membership remains



practically stationary, much to the amazement and concern of the Board of Directors. Individual directors give freely of their time to the Society; there was a practically full attendance at each of the seven directors' meetings held during the year. Growers were urged to come to the directors with their problems, and with suggestions as to how the Society could function in the best interests of all.

### Reports and Papers Read

Friday was given over to lectures and discussion. H. M. Steiner discussed liquid fertilizer applications, fertilizers and mulching were covered by Dr. H. Hill, and A. B. Burrell talked on new methods and machines in spraying. Charlie Petch spoke on the newer insecticides and fungicides and Prof. J. G. Coulson discussed the life cycle of the apple scab fungus. Andre de Chevigny told of the merchandising school for sellers of fruits and vegetables, of which mention has already been made in the *Journal*.

S. J. Chagnon, vice-president of the Agricultural Prices Support Board was the guest speaker for the banquet session. He reviewed happenings in the apple industry during the last ten years, and pointed out that the Federal Government had spent more than \$25,000,000 in supporting the industry. Although no direct help was given the growers, prices had been maintained through government help to processing plants, which turned the fruit into products which had a number of uses.

He warned growers that, although there had been a good development of local markets, they must not neglect the possibilities of finding new markets, particularly in the United States, a field which has not been overlooked by the B.C. growers. Proper packaging and grading for local markets are other factors in increasing sales that should receive careful attention, he said.

### Resolutions

A number of resolutions are adopted each year: some are acted upon by the bodies to whom they are addressed, some fall by the wayside. A request that the sale of cider made at the Rougemont plant be legalized was made last year but was not acted upon by the Provincial authorities; a similar resolution was adopted by the Society this year. The Provincial Department of Agriculture was asked to modify the Agricultural Products Act to make it conform in most cases to the Federal one.

A resolution urging removal of trees of unsuitable varieties, pushed to the limit last year, had come to nothing since all the provinces had not been able to agree on its provisions, and the intention is to make this a Federal matter. The Society went on record as endorsing the proposal with the hope that it would be adopted and applied to the whole country.

Members want manufacturers of insecticides to state clearly on their containers just what their product is composed of, and not to market it simply under a trade name. It was agreed that cull apples should not be offered for sale in centres of over 10,000 population, and the Society is to appoint two members to discuss the spray

programmes with the Beekeepers' Association and members of the Provincial Department.

### Appointments and Officers

H. E. Palmer was delegated to attend meetings of the Canadian Horticultural Council, and J. E. Duchesne was delegate to the Canadian Food Council. Floyd Stevenson, Ed. Duchesne and Jacques Berthiaume continue as president, vice-president and secretary, and the executive committee for 1951 will include G. A. Baillargeon, Grant Parent, A. Pelletier, W. J. Tawse, J. M. Gillespie, Bernard Lanctot and Marc Hudon. Other directors are Father Fernand, J. Beaudin, M. Morin, G. Noiseux, Henri Laberge and Richard Cote. The markets committee will consist of J. L. Pineau, J. E. Duchesne, B. Riendeau, Rene Primeau, H. E. Palmer and A. Guindon.

## Livestock Breeders Met at Quebec

Breeders of purebred sheep, swine and Canadian cattle and horses held their annual meetings in Quebec in February, coming together later for a general meeting of the Quebec Purebred Livestock Breeders' Association.

Sheep breeders are looking forward to a banner year in 1951. With a world deficit of wool in prospect, sheep breeders were urged to increase the size of their flocks in anticipation of a price of a dollar a pound for unwashed wool in the near future. Pierre Labrecque described the progress of the plan for cross-breeding North-country Cheviots with Leicesters to get a heavy type of market lamb, and the meeting approved the idea of having a class of these at the Quebec Fair.

J. R. Pelletier felt that the average farm flock is too small, and that feeding methods in general could be improved. The meeting asked the Department of Agriculture to encourage the organization of sheep clubs as part of the junior programme, and to do everything possible to help sheep breeding in this province.

Swine breeders noted an increase in membership, and were glad to see that, whereas in other provinces there is a decrease in the numbers of purebred hogs, here in Quebec we are more than holding our own. Dr. Adrien Morin foresaw good prices for hogs in 1951, but urged that the lean type of pig be held as ideal, as this type is in demand both at home and abroad. He also urged the breeders to plan to keep hogs coming to market in a steady rhythm and to avoid flooding the market in October, November and December. He also reported for the committee which had been appointed last year to check on the performance of pigs brought from Prince Edward Island. Crosses between these and local stocks were giving promise.

The Canadian cattle breeders reported an active year with 408 breeders being members of the society. But as there are some 800 farmers raising Canadian cattle in Quebec, an effort will be made to have a still larger number of members in 1951.



Secretary Halle reported 1115 registrations and 590 transfers, 206 cows qualified in R.O.P., but only 12 herds classified during the year.

Canadian horse breeders are faced with a shrinking market. Whereas there were 2,500,000 horses in Canada in 1945, there were only 1,700,000 in 1950. Over the same period the horse population in Quebec has dropped some 24,000, now standing at 290,000. The average age of the typical farm horse in Quebec is 13½ years.

It was agreed that the increasing use of power machinery is responsible for the lack of interest in horses, but it was felt that a demand for more horses would be apparent in the near future.

### General Meeting

Some 175 delegates from all parts of Quebec gathered for the general meeting following the business sessions of the individual societies and discussed topics of interest to all, one of the most important of which was the question of Provincial versus Federal testing for Bang's disease. As things now stand, while the provincial health of animals authorities have many herds under calfhood vaccination, it is necessary that animals to be exported must be blood tested by the Federal veterinarians. No solution was arrived at, but the Board of Directors were asked to make an intensive study of the question in all its ramifications and try to come up with a plan that would be acceptable, and which would safeguard the interests of all Quebec breeders.

Minister of Agriculture Barre assured the breeders that his department is deeply interested in their problems and their welfare, but reminded them that the breeders were expected to do things for themselves and not to depend on the government for everything.

Dr. Bouchard, associate deputy minister of Agriculture at Ottawa, was another guest speaker and gave one of the witty and entertaining after dinner talks for which he is famous. Following his speech, Mr. Barre presented a trophy to mark the world record of H. L. Guilbert's Spruce Haven Farm Triumph (31,878 pounds of milk, 1,365 pounds of butter fat in 365 days). As Mr. Guilbert could not be present, the trophy was accepted on his behalf by Hermas Lajoie. Other speakers included Pierre Labrecque, J. A. Ste. Marie, and Dr. Veilleux, who described his department's campaign against Bang's disease.

Donat Giard of Ste. Rosalie was elected president for the coming year; Roland Pigeon will be vice-president and N. G. Bennett of Bury second vice-president. Armand Ouellet continues his duties as secretary-treasurer.

### New Manager For Lachute Fair

S. C. Patterson, of Stone Aye, R.R. 1, Lachute, is the new secretary-manager of Lachute Spring Fair. He takes the place of Alex Bothwell, who recently retired owing to ill-health after long and successful association with the Fair board.

## Local Ayrshire Breeders Meeting

The annual meeting of delegates from the local clubs of the Quebec Ayrshire Society was held in concert with the meeting of the National Association, reported elsewhere. The provincial society reports a membership of 1013, and notes that this is an increase over last year's registration.

Reporting on the activities of the Society during 1950, Mr. François Boulais, secretary and fieldman, reported that over 1000 members had been asked, during the year, if they wanted their herds classified. About 10% had replied, and 95 breeders asked for classification; about 39 herds were done during the year by Messrs. Toupin and Ness, to whom the thanks of the Society were extended. It is felt, however, that this work represents an imposition on the time of these two experts, and it was suggested that a man be appointed fulltime for this.

Twelve Red and White shows were held during the summer, with 105 exhibitors showing a total of 837 head; three of these shows were new in their localities, i.e., Roberval, St. Bruno and Waterloo, and although there were no more exhibitors out than in 1949, they did have more than 100 more animals out.

Routine work in the secretary's office kept the staff busy mailing catalogues of sales, circulars for local clubs, and preparing Ayrshire news briefs for over 150 English and French language publications in Quebec. Considerable time was also spent on the Building Fund Campaign. The secretary reported that he had made valuable contacts at the innumerable meetings, shows, exhibitions, etc., that he has to attend each year, and uses this as one way of trying to increase the membership in the Society, which he would like to see up to 1,200 next season.



Executive members of the Quebec Ayrshire Society for 1951 are, from left to right, S. Walker, Lachute; Roland Pigeon, Vercheres; J. P. Lizotte, president; F. Boulais, secretary-fieldman; Rosaire Vinet, Vaudreuil; and Rene Beland, vice-president.





## THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes  
and to matters of interest to them*

### Gleaned at the Semi-Annual

by Angela W. Evans

Address, reports and discussion made for interest packed sessions at the semi-annual meeting of the provincial board of the Quebec Women's Institutes which was held at the Queen's Hotel, Montreal, Jan. 19-20. Mrs. G. E. LeBaron, 1st vice-president, presided at all sessions and all provincial officers and convenors were present, and all but two counties represented. Mrs. W. C. Smallman, past president, who was unable to attend, sent greetings and good wishes.

A welcome visitor was Mme P. C. LeBeau, Secretary Home Economics and Handicrafts Division, Department of Agriculture, Quebec, who attended many sessions. She gave a brief address at the opening meeting and was very attentive throughout. "I listen with breathless interest to your splendid reports", said Mme LeBeau.

Miss Esther Kerry, president Montreal Council of Women, was another guest and took part in the discussions on various subjects pertaining to the united interests of both organizations.

Our president, Mrs. Thomson, took each listener along with her when she gave her report on her trip to Copenhagen last fall, where she attended the 6th Triennial Conference of the Associated Country Women of the World, at which, she said, "There was a wonderful spirit of co-operation." She also gave a vivid word picture of the trips made by the Canadian delegates to many points of historical and geographical interest on the Continent and in Great Britain. There was a momentary hush when our president finished her address, during which there came to my mind, with meaningful clarity, a sentence from her post-conference letter, "Five million women, with their hearts set to win the peace, won't easily be turned aside."

Also a highlight, was an address given by Mrs. Maud M. Kerr, Women's Editor, Family Herald and Weekly Star. Mrs. Kerr was one of a group of nine women journalists who toured Great Britain last fall and we were carried away on a verbal "personally conducted", as Mrs. Kerr described the beauties of the English countryside. The fortitude of the British, their indomitable bravery of spirit and their gracious hospitality were portrayed in Mrs. Kerr's address.

Mr. T. Pickup, Lennoxville, Secretary, Eastern Townships Adult Education Committee, outlined the objectives

of this group and stated that many of its services, including films, libraries, were at the disposal of the W.I.

Two new members of the office staff, Miss Elizabeth Campbell, Demonstrator and Junior Supervisor, and Miss Ida Bruneau, Handicraft Technician, were introduced. Their reports showed great activity. Many branches have enjoyed a variety of popular courses, rug making topping the list as favorite.

The report of the treasurer, Mrs. G. Parsons, showed that all projects were being well supported.

Mrs. A. Coates, convenor of Education, who has been appointed liaison officer on the Education Committee of the Montreal Council of Women, for the Q.W.I., urged all members of the W.I. to take more active interest in matters pertaining to schools. The question of suitable training for mentally retarded children is being studied and members are asked to make a survey of their own district. Mrs. T. Kirby, convenor of Home Economics, asked the members to secure information as to the demand for vitaminized apple juice and pointed out the advantage of the same. School lunches were briefly touched on and the question put to us for consideration, "Do you want price control?". Mrs. E. Reed, Citizenship convenor, suggested that Citizenship Day, May 23, be observed with suitable community programmes. Mrs. H. Ellard, convenor of Welfare and Health, urged that all W.I. members be prepared to render such services as First Aid and Home Nursing, having courses or group study. The sponsoring of young girls, nurses in training, or nursing aides, by the Q.W.I. was recommended. Mrs. Ellard gave an informative talk on the work being done by the Cerebral Palsy Association. Mrs. J. Lang, convenor of Agriculture, reported on the success and increasing number of school fairs, mentioned that seeds were available at the Q.W.I. office and stressed the importance of Junior Club work.

There was a short discussion period when various problems dealing with many phases of W.I. work were "aired", and the pooling of ideas was found to be very helpful.

The Federated Women's Institutes of Canada are holding their biennial conference in Quebec at Macdonald College, the week preceding the Q.W.I. convention. After suggestions for these meetings were discussed final arrangements were left in the hands of the executive and the F.W.I.C. Convention Committee, Mrs. G. D. Harvey, 2nd vice-president, chairman. Written suggestions on ways to improve the annual convention may be sent to the Q.W.I. office.



## Adventuring With The Q.W.I.

A manual of services offered by the Q.W.I. has been prepared and copies distributed to all branches. This contains a foreword by the president, Mrs. R. Thomson, who uses the term quoted in the title of this item, to express the purpose of the leaflet. A table of the courses conducted by the demonstrator and handicraft technician is given, followed by detailed information as to their operation. A page at the end is entitled, "Use Your Office." Here are the courses as outlined in the leaflet.

Types of Service	Section	Topic	Time
County Training Schools	Clothing and Textiles	Let's Sew a Dress	3 Days
	Food and Nutrition	Be Your Own Baker	2 Days
		Vegetables and Fruit	2 Days
Short Courses	Clothing and Textiles	*Let's Sew a Dress	5 Days
	Art	Lino-Block Printing	2 Days
	Handicrafts	*Weaving	5 Days
		*Leather	5 Days
		*Rug-making	5 Days
		*Feltwork	5 Days
	Food and Nutrition	The Oven Way	1½ Days
		*Be Your Own Baker	2 Days
*Vegetables and Fruit		2 Days	
Workshop	Handicrafts		20 days
Conferences	Food and Nutrition	Conservation by Canning	3 hours
		School Lunches	3 hours
		Economy of Better Buying	3 hours
		Foods for Healthy Appetites	3 hours
	Art and Music	Art Appreciation	1 day
	Home Management	Take Time to Make Time	3 hours
		Managing the Family Income	3 hours
	St. John's Ambulance Association	First Aid	6 weekly 2 hour lectures
Child Welfare		12 weekly 2 hour lectures	
Home Nursing		9 weekly 2 hour lectures	
Hygiene		14-18 hours	

\*Only available if in the case of CLOTHING AND TEXTILES the Training School project is not possible, and in the case of HANDICRAFTS, the Workshop cannot be operated. Reasons for the impracticability of a Training School, or Workshop, must be included with the application for these courses.

## Nurses Needed!

by Dorothy Ellard, R.N.

There have been few periods in Canadian, and one might also add, in World History when the need for nurses to care for the sick and to help provide protective services, has been more acute than it is today. At the same time there has never been a time when the nursing profession has so much to offer in varied fields of opportunity as at present. Nursing is an honorable career, and there is no work more noble than that of serving suffering humanity. Of all professions open to women, nursing ranks with the highest in social standing. You can be proud to be a nurse and others will be proud to know you.

The following are qualifications necessary for a good nurse, they do vary somewhat according to the branch of nursing in which the nurse is engaged. However, every girl who goes into training should have the following qualifications:

1. Good Health — Physical and Mental. 2. Intelligence. 3. Versatility. 4. Courageous Optimism. 5. Even temperament (not moody or easily depressed). 6. Individuality.

Other qualifications of a good nurse can be acquired while in training. I would list these as follows:

7. Patience. 8. Orderly methods of working. 9. Control of one's temper. 10. Sympathetic understanding. 11. Tolerance. 12. A cosmopolitan viewpoint. 13. Self confidence. 14. Ability to get along with other people.

These qualifications are those stated as necessary in a booklet published by the Department of National Health and Welfare for the Canadian Nurses Association. Anyone interested in taking up nursing as a career, should write to the Canadian Nurses Association, Crescent Building, Montreal, for "Schools of Nursing in Canada." They will send a folder that gives you basic information about each and tells you how to choose a school.

The educational requirements vary somewhat in the different provinces, but in most of them students must have at least four years of high school and in some schools more education is called for. For those girls or women, from 18 years up that do not have the educational requirements necessary to train for a professional nurse, there is a splendid opportunity in Quebec to train for a Nurses Aide. The applicant must possess: 1. One year of High School. 2. Must be 18 years of age. 3. Must be in good health.

The school in Montreal is the only one of its kind, being sponsored by a group of Montreal hospitals, whose contributions have made its existence possible. The course, at present offered, covers 6 months period of instruction and practice, followed by 6 months in one of the participating hospitals, during which time they will be paid a salary. It was the pleasure of your Convenor of Health and Welfare, together with the Q.W.I. secretary, to inspect this school and to be shown by the Director, the



rooms where the students study, their sleeping quarters, dining room and kitchen. We saw the students at work and play and all one can say is, that it must be a golden opportunity for anyone to work in such ideal conditions. One could see that students are taught good deportment and the immaculate exquisite care of patients, which above all, is the need for a nurse in giving good bedside care. Your convenor would like to see more of our rural girls take up this work and it would be a wonderful thing for our County Institutes to sponsor a girl or woman at this School for Nursing Aides. Also, if they could afford it, to sponsor a girl to take up nursing as a profession, the need for both is very great.

As women, we know what it means to need nursing care in our homes in time of sickness but how often we find that, because of the scarcity of nurses, it is impossible to get it. The members of the Q.W.I. could show a good example by encouraging and supporting girls and young women to take up nursing.

The following is something tangible for a nurse to live by.

Four things a nurse must learn to do  
If she would make her record true:  
To think without confusion clearly,  
To love her fellowmen sincerely,  
To act from honest motives, purely,  
To trust in God and Heaven, securely.

## The Month With The W.I.

Thought for the shut-in and needy of the community is still a feature of all reports and the overseas parcels are mentioned with increasing frequency. No wonder the Q.W.I. can be proud of the continuing support being given the Personal Parcel project, carried on now for so many years and still meeting such a real need.

**Argenteuil:** Brownsburg, at an evening meeting, heard an address on "International Travel", by Mr. S. Goldsworthy and two vocal solos by Mrs. Blakely. Mrs. Mason, Home Economics convenor, gave out meat charts and recipes. Mrs. L. Wilson was appointed convenor of the 25th anniversary supper to be held May, and plans were made for a children's party with Mrs. Lynch in charge. \$5 was voted to the Children's Memorial Hospital. Frontier had a contest, "Name the animal." \$15 was donated to the Children's Memorial Hospital. At Lachute the W.I. Library is open every Friday from 3.45 to 4.45 p.m. in the basement of the Lachute High School. They now have 700 books and add a book by a well known author each week. Their meetings feature book reviews on the books of the library. Lakefield was happy to welcome its president, who had been absent two months through illness. Plans were made to start a travelling apron on its tour. Morin Heights made plans for starting a First Aid class. Mrs. M. Day, Citizenship convenor, invited Mr. Blakely, principal of the school, to show the picture, "Unfinished Rainbows", which was much enjoyed.



The Bury Women's Institute visits the Carnation Milk Company's plant in Sherbrooke. The president, Mrs. George Parsons, at left in the front row, displays literature distributed to the members by the management.

Pioneer planned an old-fashioned supper and Miss Janet McOuatt showed views of Canadian scenes. Upper Lachute and East End held a spelling contest and an article on "Publicity" was read.

**Bonaventure:** Black Cape, at a busy meeting heard a paper on "Health". Marcil welcomed two new members and made plans for a card party. New Richmond discussed the teacher's report on the scholarship and made suggestions for carrying on this project. Port Daniel, an authentic bit of village history made the rollcall and a contest, "Animated Spelling Match", was won by Mrs. E. A. Sweetman. Restigouche reported on the treat which was planned for the children and Shigawake held a successful community party.

**Brome:** Austin, under the convenorship of Mrs. A. Dufresne, held a "Citizenship" meeting with Mr. H. Gosselin, Federal member for Brome County, as guest speaker. Representatives from ten different countries were welcomed at this meeting and each gave a short talk on her native country, warmly praising Canada for the welcome received here. Knowlton's Landing held a successful weaving course under Miss Bruneau, and two members have since bought looms. A donation of \$5 was given to a memorial in Mansonville School, encyclopedia and book case, for two students, who were accidentally drowned. South Bolton raffled a quilt and has started another. Each member gave a donation toward boxes sent to England. Sutton meets one evening each week in the Legion Hall to make pads for blood donors. Miss Shirley Baker gave a report of the Short Course.

**Chat-Huntingdon:** At Aubrey-Riverfield items were read by all convenors and Mrs. N. Robertson gave a paper on "Canada's Wealth." Dundee held a successful card party. Two dozen chairs have been ordered for the hall. Mrs. C. Smallman read a paper on "Denmark." Franklin Centre made plans for a card party. Hemmingford heard an address, "Helping to Build a Better World", by Rev. W. Holmes. A demonstration on darning by using a "darn-easy" was given by a member. Howick answered the rollcall by exhibiting a piece of china-ware and telling



its history. A paper on "China-ware and its History", was given by Mrs. W. Hamilton and the talk, "The Kootenay Twins, Nelson and Trail, B.C.", by John Fisher, was read by a member. Huntingdon gained much information from Mr. Wm. Boyd's talk on "Publicity by Photography." Mrs. W. Perkins gave a demonstration on cutting and using rags to hook rugs.

**Compton:** Canterbury heard a paper on "Canadian Industries," and the trees of Compton County and their uses were discussed. A contest in handicrafts was held. Bury realized \$114.80 from a sale and card party. A talk was given by health nurse from the school. Clothing was provided for a mother and five children and a fund is being started for cod-liver capsules for the school. Bury Jr. W.I. sent a box of stuffed animals and favours to the Children's Memorial Hospital. This thriving branch entertained the Sr. W.I. to celebrate its first anniversary. Cookshire heard a paper on "Montel Steel," and made plans for a bridge and canasta marathon. East Clifton paid the note on their community hall. A baby shower, when a silver spoon was presented by the branch, was held and material given out for Cookshire fair county project. \$3 was sent the Q.W.I. Service Fund. South Newport had a contest on table decorations. A letter from Manitoba, thanking this branch for gifts received at the time of the flood, was read.

**Gaspé:** Sandy Beach donated one case of soup to the school for hot lunches. Talent money was turned in, one member raising \$11 from an allowance of 50 cents. Wakeham distributed prizes in the school. Two quizzes were much enjoyed. York donated \$5 to the March of Dimes and offered prizes for the highest marks in mathematics in Grades IX and X, in June.

**Gatineau:** Aylmer East heard paper on "The Marshall Plan", and "The Romance of the Seed." Reports on the Short Course were given by two boys whose courses were

sponsored by this branch. Eardley realized \$45.95 on a series of card parties. Quilt blocks were turned in to make a W.I. quilt, with a prize for the best block. A paper, "The Maple Tree and its Products", was read, with a quiz following. Wakefield's meeting, under the convenor of Canadian Industries, featured a paper on the deposits of titanium now being developed in Northern Quebec and Labrador, and a contest, "Industries of Gatineau County." A recent play netted the sum of \$165.16 and \$31 was cleared on TB seals. \$100 was voted the Gatineau Memorial Hospital Fund and \$10 to the Library Fund. Wright had a paper on "Symptoms and Care of Arthritis," by the convenor of Health and Welfare and a demonstration on bandaging was given. A hilarious contest, "Best manicured finger nails", with only the hands of contestants visible and three local gentlemen as judges, was much enjoyed.

**Jacques-Cartier:** Ste. Annes members were guests at the Birthday Social meeting of the Vaudreuil-Dorion Branch. At their own meeting Prof. A. Henry, Macdonald College, gave a talk on "Improvements in Education in the Last Fifty Years". An auction of preserves and pickles, donated by members, brought \$5.50 and the drawing for a cake \$1.50.

**Megantic:** Inverness reports having received several gift packages the contents of these, when sold, netted \$11.50. One member demonstrated the practicability of plastic towels. A radio was purchased for the school. A handicraft exhibit was held and \$5 sent to Save the Children.

**Missisquoi:** Cowansville held a social evening, showing films which were very interesting. At Dunham \$15 was voted for prizes at the local school and \$5 to the Service Fund. Fordyce had a social afternoon when cards were played with prizes given. The Citizenship convenor was made a member of the United Association of Canada.



The Lennoxville Women's Institute celebrates its thirty-sixth anniversary at Elmwood Inn, Lennoxville.



**Pontiac:** Fort Coulonge members put on a drive for the Canadian March of Dimes. At Bristol a paper, "How the W.I. was first organized" was read and Mrs. E. Findlay gave a story, "All is Well." A letter was received from the Women's Auxiliary, Pontiac Hospital, thanking the branch for its gifts to the hospital. Quyon cleared \$40 at a dance, and the proceeds from a euchre party were used for a needy family. Mrs. Fraser was the lucky winner of the quilt raffle. Arrangements were made for a teen-age class of girls to take a course in sewing and knitting. Two new members were enrolled. Beech Grove gave \$15 to the new school in Quyon for kitchen equipment and \$15 toward treat for United Church Mission Band party. At Elmside the Home Economics convenor discussed the uses of lemons and lemon juice. Wyman's programme featured information on new industries in our Country. Useful articles made from sealer cartons were suggested and a parade of aprons was held.

**Richmond:** At Cleveland a quiz was conducted by the convenor of Education and a candy contest held. Melbourne Ridge helped a needy family, remembered an elderly lady on her birthday and held a party to raise funds. Shipton feted a bride to be. A travelling apron is being circulated among the members. Spooner Pond had a quiz on Canadian products and made a donation to the March of Dimes.

**Rouville:** Abbotsford had as guest speaker, Miss Helen Buzzell, lately supervisor of Art in Montreal Protestant Schools, who gave an instructive talk on "Modern Art," which she illustrated with copies of pictures by well known artists.

**Shefford:** Granby Hill gave \$10 to the Children's Memorial Hospital and a shut-in was remembered. At Warden, Citizenship was the theme of the programme. A paper, "World Situation as it affects Women", was read and a contest held on international events in 1950. Plans were made for a food sale.

**Sherbrooke:** Ascot donated \$15 to their school for hot lunches. Several members took advantage of the courses in Handicraft being held in Lennoxville this month, with Miss Ida Bruneau instructing. This branch has commenced work on a hooked rug to be entered in the Tweedsmuir Competition. Belvidere donated \$10 to the Cancer Fund, \$10 to the March of Dimes and \$5 to Lawrence School for hot lunches. Brompton had a paper by the convenor of Home Economics. \$4 was voted to hot lunches at MacLeod School and a box sent to a veteran. Cherry River was pleased to entertain the county president, Mrs. G. Richards. A handmade centerpiece was sold to swell the treasury. At Lennoxville short histories of local industries were given and a new member was enrolled. Milby at a busy meeting, made plans for entertaining the county meeting. Two contests were conducted by Mrs. G. McVety, convenor of Home Economics. Orford heard a paper, "Communism still has its

Dupes." \$16 was sent to Q.W.I. Service Fund, \$10 to I.O.D.E. for welfare work and a sum towards furnishing a children's ward at the new Sherbrooke Hospital.

**Stanstead:** Ayer's Cliff planned a social evening to raise money for school lunches. Beebe sold a quilt and prints were donated for another. Plans for an oyster supper were made. Minton heard several articles from the College Journal. A travelling apron was brought to the meeting to aid funds. Stanstead North had several interesting articles on the life of Mrs. Hoodless. Tomifobia suggested that the school fair prize list be revised and made donations to the Legion and the local skating rink. Way's Mills sent two boxes of toys to the Children's Memorial Hospital and provided clothing for some needy children.

**Vaudreuil:** Cavagnal donated \$25 for scholarships at Hudson Heights school. Plans were made for the annual luncheon in March. Vaudreuil-Dorion held a "Telephone Bridge", and quizzes, puzzles, and a couple of three minute skits were the programme at a social meeting.

## What I Have Learned By Being A Member Of The W.I.

by Mrs. T. S. Gardiner (deceased)

President, Huntingdon, W.I.

To begin with I learned to fall in line promptly. Secondly to feel a responsibility to be at every meeting, be early and bring something of interest to that meeting if I could.

It has made me a little more ambitious about everything in connection with my home.

It has unfolded to me that beautiful spirit of unselfishness, good citizenship and other admirable qualities in many of our town women, and of many women throughout the whole Dominion. I received that vision and inspiration at Macdonald College last summer. I was quite amazed at what the Women's Institute really meant.

I had no desire to thank you for electing me a president of the Institute a year ago. I could see no honour in it. But if you will accept my thanks now I will gladly offer them in all sincerity. It has really been good for me, as it will be good for any one of you in future, to accept this position and have the privilege of being identified with the best women in our country, for the general good of all.

I like the Institute because it embraces and has use for every woman within ten miles around. No woman can come here, three months in succession and repeat the Creed and not be inspired with nobler outlook on life. "Grant we may realize it is the little things that create differences, that in the big things of life we are one."

I am only one, but I am one, I cannot do everything, but I can do something. What I can do, I ought to do. What I ought to do, by the Grace of God I will do.





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## Strippings

by Gordon W. Geddes

We are quite pleased with the idea we borrowed from the U.S. farmers. It is a litter carrier truck for wheeling the bucket around the stable to any place it may be needed. Under proper conditions no track is needed inside the barn at all. There is the usual track outside for disposal of the material. In our case we decided to continue the use of the existing track. However, the truck is just the thing for cleaning hog-pens and calf-pens. They are not made in Canada so we investigated in the States and finally got a second-hand (in need of some repairs) for a few dollars. Now they were forty-five dollars some months ago. It was rather amusing when we brought it across the line. It was tied on the back

of the car with traffic rather heavy. The official took one look at it and said "Worth about seventy-five cents. Get out of the way with it."

Of course such opportunities would not exist on any large scale but it would not be too difficult to make one. The main frame is two pieces of 1½ in. pipe running straight under the bucket with one end bent up to a convenient height for a handle. Another piece of pipe is welded across them for a push-bar. The two main wheels are on an axle placed under the two pipes so that the greater part of the weight is on them. At the handle end is a smaller caster wheel mounted so that it turns freely so the truck can turn in any direction. They were not on when we got it but we put on two flat pieces of iron bent to a U shape to fit the bottom of the bucket on top of the pipes for a saddle for the bucket.

What was that about a butter surplus? It doesn't seem to be very large just now. However farmers should remember that they are paving the way for the margarine bloc when they reduce production to that extent. We just contributed last summer to a campaign to increase consumption of butter and then this winter we are not producing the goods. We can't expect the consumers to stand by us if we don't stand by them. And we would not only assure ourselves of a future market but we would gain immediately from the increased income. Our local cooperative creamery shows what happens. We did not make ends meet last year, as our volume was too low. Since we cannot hope to increase the number of patrons it was suggested that the patrons should increase their production an average of twenty per cent, a very reasonable goal and easily reached. When a two-week cheque for a man with a large herd of cows gets down to forty-one cents there is room for improvement. So a letter was sent out to the patrons suggesting the need for an increase and some means of bringing it about. The immediate result was a number of requests to mind our own business (which was what

we thought we were doing). Since the cooperative belongs to the shareholders they would be minding their own business twice if they did increase their production.

What at one time seemed an impossibility is now almost an accomplished fact, the matter of getting out sufficient fire-wood. When it was about half done we got a little help

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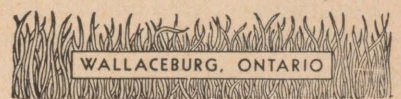
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for a time. To-morrow should see it finished but here another problem comes up. How are we going to get it sawed up? Our old standby, who has done the job for years, is out of luck this year and cannot do it. A pinch-hitter seems to be hard to find but probably the matter will be solved in due course. At least the stuff will be out of the woods while there is a little snow for hauling.

As might be expected, the tide seems to have turned somewhat as to the cost of timothy seed. It had reached such an astounding figure that many of the farmers saved their own, including ourselves. Present quotations seem to be about half what they were last year. Even at that our requirements would mean quite a little bill and we are curious to see if seed from a really good stand gives us any better hay. It is about time for a swing in the price of alfalfa seed. According to present information, it is so high that we shall go on strike and sow only the few pounds we had left over last year. The imported seed is cheaper but it is dear at any price as it is not hardy enough for us. Remember that it is identified by part of the seed being stained so look out for "bargains" in alfalfa seed with some red seeds in it.

Also look out for a drop in hog prices as we have some nearly ready to go. For two years we have been unable to hit a high market with any of ours. This time we shall be close to it but probably not close enough.

Last fall we traded for a half-ton truck thinking it would be more useful to a farmer and that prices were on the way up. We expected to be snowed in for the winter very shortly. Strange to say our road has been open practically all winter, only two short closures. It proved very convenient when it came time to take our Vanguard oats to the cooperative cleaning mill. It was too slippery for our unshod horses but we did it very conveniently with the truck. And it costs so much to get a horse shod that it would be almost cheaper to buy a ton of seed oats.

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## Milestones In Science

# THE COLLEGE PAGE

The Macdonald College Royal is a student undertaking; an agricultural show with added attractions supplied by the School of Household Science and the School for Teachers. The hundreds of visitors who come from far and near (this year they included some fifty students from the Kemptville Agricultural School) see the College on display. The College also holds open house every June when Farm Day explains to the public what contributions the College makes to agriculture; but then the preparations are made by the staff, whereas the students themselves do all the planning, arranging, advertising and running of the Royal.

One of the main features of the day was the livestock show, which ran from early morning until after five in the afternoon. Animal Husbandry students in the Degree Course, and students in both years of the Diploma Course, fitted and showed hogs, sheep and beef and dairy cattle in a large number of classes, and at the same time participated in competitions which resulted in the choice of a grand champion showman. As was to be expected, the judging arena was a focal point of interest all day, and many well-known personalities in the livestock world watched the show and expressed appreciation, not un-mixed with surprise, at the truly professional way in which the youthful showmen (and women) paraded their animals, and at the way the organizers had carried out their part of the programme.

### Inter-option competitions

Degree Course students at the College, after the first two years of study, branch off into a number of specialties, according to their individual preferences. At the Royal, each "option", using this term to denote a group of third and fourth year students all taking the same course, prepared a display in the gymnasium, through which they attempted to show just what each of these divisions of scientific agriculture contributes to better farming. To give one or two examples — Animal Husbandry stressed progress in clean, rapid handling of milk, and the dangers of using anything but the cleanest of equipment. Poultry Husbandry highlighted the improvements in the past forty years in poultry feeding; Entomology described the life cycle of the potato beetle and

showed methods of control, progressing from the old-time hand picking into a can of kerosene to the present use of DDT sprays. And so it went through fourteen booths.

The School for Teachers demonstrated advances in the art of teaching, and Household Science presented a very interesting display of changes which increasing knowledge has made possible in methods of baby feeding during the past ten or fifteen years. Handicrafts, fitting into the general theme, had a convincing display of articles that can be made, by those skilled in using their hands, from hides of various kinds, from cowhide to snakeskin.



Horticulture students and their prize-winning booth.

The graduating class of 1948 donated a challenge shield to be presented each year to the group presenting the message of their booth in the most graphic, yet simple way. This has been won in the past three competitions by Household Science, Agronomy, and Plant Pathology. This year the judges, Mrs. G. G. Martin, Supervisor of Home Economics for the Montreal School Board, Mr. H. L. Trueman, Director of Administrative Services, Ottawa, and Mr. W. B. (Bud) Brittain, Science Service, Ottawa, gave the nod to the Horticulture students, who had, very simply but very effectively, explained the advantages of dwarf apple trees for small areas.

### Livestock Awards

In the livestock show the first year Diploma Course students racked up 77 points to take the Animal Husbandry Shield; the second year Diploma boys were in second place with 70 points.

*(Please turn to the inside back cover.)*





(1, 3) The livestock show was carried through in a truly professional manner. (2) The judges found it no easy task to pick a winner among the many excellent exhibition booths. (4) Grand Champion Showman was Ken Nixon of Vankleek Hill. (5) The booths in the gymnasium all showed evidence of careful planning and workmanship. (6) Dean Brittain and Minister of Agriculture Gardiner looking over the Agronomy Department booth. (7, 10, 12) The School of Household Science put on a fashion show, gave demonstrations of candy making, and prepared an exhibit showing trends in fashions over the years. (8) The Horticulture Department's exhibit of flowering bulbs, and of white lilacs flown from Holland, was a "must" for everybody. (11) Nobody counted the crowd, but it was well up in the thousands. (9) To round off the day came the Green and Gold Revue in the evening, played to a "standing room only" house.



While the animals were being shown, their student handlers were also being judged on their showmanship ability, and when the final results were in Kenneth Nixon of Vankleek Hill, Ont., a first year Diploma student, emerged as grand champion showman, winning the silver cup offered by the Montreal Farmers' Club. Murray Warnica of Barrie, Ont., a second year Diploma student, was in reserve. Mr. A. W. Peterson, Associate Chief of the Production Service at Ottawa, who judged showmanship, had nothing but praise for the way all the contestants had handled their animals.

Other features of the day included an exhibit of old-time farm machinery in the Agricultural Engineering Department, alongside samples of the most modern types, seed judging in the Agronomy Department and poultry judging.

Household Science contributed to the activities by preparing a display of modern fabrics, showing all the steps in manufacture, from raw material to the finished product. The girls also ran a continuous candy-making demonstration and staged a fashion show which had to be given twice to accommodate the crowds, which filled the Assembly Hall to near capacity each time.

Among out of town visits were Minister of Agriculture Gardiner, just back from a flying trip to England, who officially opened the show. J. W. Graham, Chief of the Livestock and Poultry Division at Ottawa, who judged sheep and swine, George MacTavish, who judged beef classes, Gilbert McMillan who judged the Ayrshires and W. A. Hodge who placed the Holsteins.

Chairman of the organizing committee for the Royal was M. F. Gillis of Newfoundland, a fourth year student, and Jim Sorley of Ottawa was in charge of the livestock show.

## Portent for Canadians

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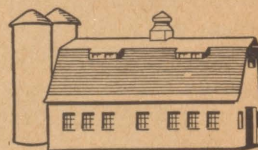
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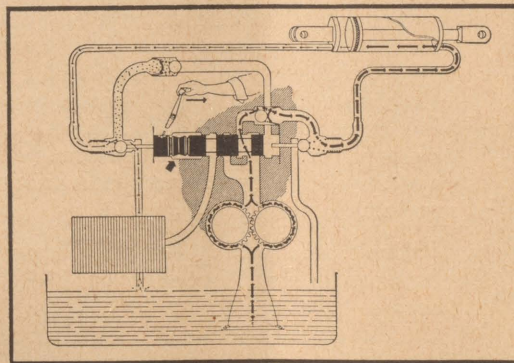
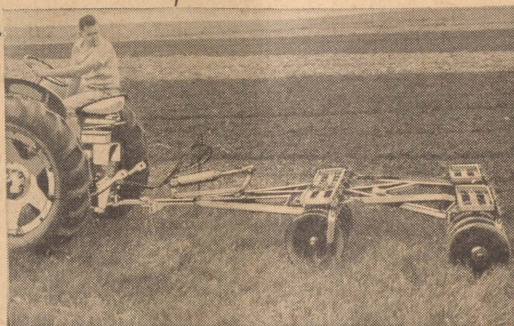
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